

THE AMERICAN FARMER,



SPRIT OF THE AGRICULTURAL JOURNALS OF THE DAY.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS."

Virg.

Vol. II.

BALTIMORE, JUNE, 1847.

No. 12.

OUR PRESENT NUMBER.

The present number of the *American Farmer* closes the present volume, and we cannot permit the occasion to pass, without returning our unfeigned thanks to its numerous patrons, for the deep interest they have taken in increasing its circulation. To us it has been a source of pride to receive, from various sources, the most solid testimonials that our labors have found favor with those for whom it has been alike our duty and pleasure to cater. In the execution of our work, we have neither spared time nor expense, to give to its pages such varied character, as comprehend every pursuit of the husbandman, and keep all constantly advised of every improvement in machinery, and the implements and tools adapted to the purposes of agriculture. So also, have we studiously labored to draw from every source, both foreign and domestic, whatever there was valuable or novel, both in the improvement of the soil and the means of its culture. We have sedulously directed our attention to the entire range of manures, mineral and calcareous, as well as animal and vegetable, and endeavored to impress our readers with a just view of their respective value, modes of application, and constituent elements. In a word, we have striven to make the *Farmer* at once a scientific and practical work, in order that all descriptions of farmers and planters may find in it the materials for enlightened contemplation, and enlarged usefulness; and unless we have been deceived by those in whose judgment we confide, we have been successful. To be made sensible that such is the case is among the most pleasant incidents of a publisher and editor's life.

As this is the last number of the present volume, so will the next be the first number of the coming one. In noticing the forthcoming volume, we would appeal to each subscriber, to interest himself to obtain us one or more new patrons, in time to enable us to forward them the opening number of the volume which will commence on the 1st of July next, ensuing. It is our most fervent desire to embellish the next vol-

ume with many valuable cuts of farm houses, from the great house,—to use a term which we cherish from early associations—to the barn, stable and quarter. To do this, will require considerable outlay in money, and no little expenditure of time and mind, to render such embellishments acceptable—we, therefore, have been emboldened to tax the friendly offices of our kind friends, conscious that they, as well as ourselves, will profit by every additional name they may be instrumental in adding to our list.

WORK FOR THE MONTH.

We have now the first summer month, and with a very few exceptions, the *Spring* has passed by without affording any of those delightful days which, in our youth, used to be so congenial to our feelings, and make our young blood and mind run riot in the extacy of enjoyment. Nor is this all that is calculated to mark the season just past as one of extraordinary character. *March*, true to her nature, was as boisterous as of yore; but *April*, celebrated in song as the month of showers, proved as dry and crusty as an old bachelor, and *May*, once so prodigal in her moist favors, was as churlish as her predecessor.—So that between winds, droughts, frosts and ice, the farmers and planters have had but an indifferent chance to get on with their work. But of this none should complain. It has been so ordained by an all-wise and inscrutable Providence, and it behoves every one who believes in his mercy to yield not only without a murmur, but to receive it as a dispensation for which he should offer up his aspirations in a spirit of thankfulness. If we have had a cold and cheerless spring—if our field operations have been thereby retarded—if our pastures have suffered for the want of the springing influence of genial rains—if our dairies have been curtailed of their products—if our grain fields have been stunted in their growth—if our corn plants have taken on the sallow hue of sickness—still we have cause, abundant cause, to send forth the shout of thankfulness, that while our kindred in our father-land were suffering with the

scourge of famine, and its concomitant, disease, we, through the paternal care of "Him who tempers the wind to the shorn lamb," have been blessed with abundance, and enabled at remunerating prices to relieve their wants and stay the currents of hunger and pestilence.

Passing from these thoughts, we would, before we open our budget of monthly hints, state that we have paid strict attention to the news brought by every arrival from England, and Europe generally; and, after thoroughly reflecting upon it, have been confirmed in the opinion we have before repeatedly expressed, that, for several years to come, grain and provisions, will bear such an appreciated value, as to *liberally reward* those who produce them in this country. In view of this pleasing prospect, we would enjoin it upon all, to proceed on with their work with a *will*, as the sailor says; for they may confide in the hope, that all their surplus products will find ready markets and goods prices. Such has been the universality of short crops in Europe, that it will take some years to bring up *leeway*, and render the granaries competent to supply any thing like the demands of population. And we would impress this fact upon our agricultural friends, that, before an equilibrium of supply and demand shall have been brought about, the *intrinsic value of corn and corn-meal, as food for man and beast*, will have taken such hold upon the British judgment, as to make them so necessary to their wants that they will not be able to dispense with them.

With these preliminary remarks, we will pass to the details of work

ON THE FARM.

Wheat.—Judging by the long continued drought in this part of the country, as well as from the accounts which have reached us from various other parts, and by the almost uninterrupted continuance of cold weather, we have arrived at the conclusion, that the wheat harvest will be some weeks *later* this year than usual. But as we believe it to be true economy of time, as well as of money, always to be ahead of one's work, we would here advise all, to take time by the forelock, and prepare every thing in the shape of implements, and in the way of *force*, so as to be in a condition to commence their harvest so soon as the grain may be ready for the reapers. And as from all we can hear, the crop will be a short one, and wheat when gathered, *will be wheat*, and command a pretty round price, our advice is, that all possible pains should be taken to cut it at the right time, and stack it away, so as to ensure it against the ills of wet weather. The proper time to cut, is, when the *stem*, just below the head, becomes *dry*, and the source of nutritive supply from the roots are thereby cut off. By waiting until the entire stem is dry, great losses are sustained from shattering, while, on the other hand, no advantage is to be derived to the kernels. That this is the case, is so obvious, that we need scarcely illustrate it by argument, and will

content ourselves by remarking, that when the extremity of the stem becomes arid, that the circulation from below is arrested in its course, and the process of nutrition cannot be carried on, as at that point, the conduit is literally cut off. It is worthy of an observation, that wheat when cut before it becomes *dead ripe*, yields a heavier grain and whiter and more productive flour than when harvested at a later period. What we mean by more *productive* flour, is this, that it will take more water, and, consequently, make more bread, pound of flour for pound of flour, and hence, is better for the baker. By cutting wheat at the period we have named, the straw is infinitely better adapted to the purposes of feeding, much of its nutrient properties being retained, which, when cut at a later period, would be lost by evaporation.

We would iterate our advice, that all possible care be taken to protect the grain and straw, after it is down, from the influence of the weather, as we know from experience, that *neglect* at this period is calculated to impair the slightly appearance, as well as market value of the grain. In stacking, let the utmost care be taken to exclude the possibility of injury from the rains, and to ensure this, each stack should be capped, so as to turn the rain. And we would here remark, that, while every operation of the harvest is going on, the master's *presence* is indispensably necessary—that, though he may not labor himself, his presence will tend to make his *hands* do their work in the way that it should be done. The best of hands, if not closely superintended by those whose *interest* is at stake, will, without intending it, slight their work, and inflict injuries without designing them. Unfortunately, it is in the nature of most men to act thus, and although we would not punish a natural fault, we certainly would so act as to ensure against it. Bear in mind, that he who encounters the toil and expense necessary to make a crop, rests under a high moral obligation to preserve it from going to waste.

Corn.—As there is the most flattering prospect ahead to justify the belief that Corn will continue to command a high price, every corn-planter should feel it a moral duty to have his fields carefully tended. No matter how well the ground may have been manured and prepared for the crop, if weeds and grass be permitted to surround the plants to divide with them the nutriment and salts of the earth and air, a stunted growth and diminished yield will inevitably ensue; whereas, in all well manured or naturally fertile soils, if the soil be kept stirred and open to atmospheric influences, and the plants be kept clean from intruders, the season must, indeed, be extremely adverse, if the product be not a liberal one, for of all the grain family there is none more generous in its return for labor bestowed upon it.

It is perhaps too early to form any opinion how the season may operate upon this crop: thus far, however, it has proved inauspicious. With but a few days of partial rains, April and May were months of

excessive drought, and the young corn suffered greatly for want of moisture; but we sincerely hope that no one on account of the dry weather suffered it to go unworked. A too common opinion prevails—and we regret that it does prevail—that if corn be worked in dry weather it will *fire*, as the phrase is. Our opinion is, that by lacerating and cutting up the roots by too deep ploughing, such injury may result either in seasons of rain or drought; but we do not believe that any such result would ensue if the cultivator were used instead of the plough. By stirring the earth with the former implement, you prepare it to attract and appropriate to itself the dews of night to a much greater extent than it would if unmoved; and, therefore, instead of properly stirring the earth tending to fire the corn, it would act as a preventive.

Fall Potatoes.—The earlier these are planted the better. For a safe manner of planting them we refer to our last month's remarks upon this head.

Mangel Wurzel, Sugar Beet, Carrots and Parsnips.—If these crops have not already been thinned out, they should be without farther delay, and kept clean during the season until they are laid by; the time for which it when the leaves are sufficiently large to shade the grounds and keep down all intruders. He desires to make large crops of either must keep that the ground open and clean.

Ruta Baga.—If you desire to cultivate a crop of this excellent root, you should immediately plough the land you intend for it. Plough it as deep as you can drive your plough, then harrow it, and after the grass starts, say in about two weeks, cart on and spread your manure and plough it in some three or four inches deep, harrow so as to reduce the soil to a fine tilth, then roll. This done, lay off your drills 2 feet apart and 2 inches deep, then drill in your seed thinly. If you have a drill barrow use it; if not, use a bottle. Cover with a rake and press the earth with the back of that implement, so as to bring the soil immediately in contact with the seed, and thus promote early germination.

As soon as you have got your seed in, sow over the rows equal parts of Ashes and Lime, at the rate of 10 bushels to the acre.

Manure.—Such manure as are used for the common turnips suit this variety. A mixture of cow manure partially rotted—stable manure, or barn yard manure, in the same condition, mixed with one-eighth its quantity of ashes and about 20 bushels of bone manure would make a most excellent compost, and if properly applied in a good deep warm soil, would not fail to yield an abundant crop—and we will here remark, that for feeding to sheep, and stock generally, it is one of the most valuable roots grown, and that, under favorable circumstances of soil, season, manure, preparation of ground and culture, it will yield as heavy a crop as any other.

Quantity of manure per acre.—20 double horse cart loads.

Quantity of Seed per acre.—Where care is taken in

the drilling in the seed, 11b. per acre will prove sufficient—if put in without care in its distribution, it may require 1½ lb.

Preparation of the Seed.—Soak it a day in fish oil—then drain off the oil thoroughly, put the seed in a large basin or piggan, then mix three parts plaster with one part Flour of Sulphur well together, sift this mixture over the seed and mix the whole until the seed are sufficiently covered with it to separate and prepare them for sowing.

After Culture.—So soon as the plants come up, let a careful hand go along the rows, mop in hand, and sprinkle fish oil of any kind over them. He should be followed by another with a mixture of equal portions of soot and ashes, which must be sown over the plants. This will serve not only to protect them from the ravages of the fly, but will act as a manure and encourage their growth, and soon place them beyond the period when they delight to feed on them.

When the plants are about 2 inches high, and beyond the depredations of the fly, set a careful hand in to weed and thin them out. The plants should stand from 6 to 8 inches apart in the rows.

In about a week after this operation shall have been performed, put a small sized Cultivator in between the rows, going up and down, lopping as it goes and returns. The Cultivator must be followed by *hormen*, to clean out the weeds between the plants, who, in giving them a thorough cleansing, must be careful not to hill up the bulbs, but to maintain a level surface.

Two similar workings, at intervals of 10 days apart will be all the working they will require, unless the season should prove particularly productive of weeds and grass. As to the necessity of an additional working the cultivator must be the judge—he must bear these facts in mind, that if he desires success, the plants must be kept clean, and the earth open to the influence of the atmosphere, and that he need not fear to have them worked in dry weather. If plaster, at the rate of a bushel per acre were sown over them at the time of the second working, it would be productive of the best effects.

Upon one occasion we sowed 6 bushels of refuse fish salt over an acre of *Ruta Baga*, and thought we derived great benefit from its application. The stench of the fish appeared to us to repel the assaults of the fly, while the salt itself preserved the earth comparatively moist by its attractive and condensing powers, and the oleagenous matter it had imbibed from the fish encouraged a rapid growth in the plants through its powers of nutrition.

As Corn is sure to command a high price, it should be an object with every agriculturist to grow roots to feed to his stock, and as this is the time to sow *Ruta Baga*, we most earnestly recommend its culture to all.

Clover Hay.—If owing to the backwardness of the season you have been prevented in cutting your clover, and have that still to do, we would advise you

to cure it by cocking it so soon as it becomes wilted. By curing it in cocks you prevent loss from the falling off of the leaves, and retain that delightful fragrance which is so acceptable to stock. In stacking it away sprinkle on every ton of it a peck of salt.—The salt will prevent its firing and becoming mouldy, beside it will enable you to stack it away much earlier than if it be not salted.

Soiling Stock—accumulating manure.—The pastures of the most notable of us afford but an indifferent bite of grass for our milch-cows towards the close of summer, and hence it is that these noble animals not only decrease in the quantity of milk given by them, but frequently fall off in flesh. To prevent these unpleasant results, should therefore be an object with all who study their interest, or regard the comfort of their domestic animals. Two acres, if divided into 4 equal parts and sown at intervals of two weeks apart with *Millet* and *Corn* broadcast, would yield provender enough to feed 20 head of cattle, of a night, from the last of July till well into the fall.—Say that the first half acre of *Millet* be sown on the 1st of June, and the 2d on the 14th of June—the first half acre of corn on the 1st of June, and the second half acre of corn on the 14th of June also. By the time that the first portion of *Millet* was cut and used, the second part would be ready to cut, and by the time the *Millet* was consumed the corn would come in play, the one sowing succeeding the other. By this kind of night soiling the milch cows would be kept in good condition, yield plentiful supplies of milk and delicious cream and butter. This, however, is only one of the advantages to flow from soiling; for by confining the cows of a night, a very large quantity of manure would be made, which could be much increased by hauling into the yard large quantities of leaves and mould from the woods, and spreading it over the cow yard to absorb the liquid voidings of the cows, every pound of which would become good manure. In spreading these leaves and mould over the surface of the yard, pains must be taken to give to it a dish-like form so as to prevent loss by the rains.

Quantity of Millet Seed per acre—3 pecks—quantity of Corn 3 or 4 bushels. For such purpose a rich deep loam is best, and it should be highly manured.

Millet for hay may still be sown; for the mode of culture and cure we refer to our last month's "work."

Rye.—In timing the cutting of your Rye, be guided by our remarks relative to wheat.

Barley.—This grain should always be cut before the stem becomes dry—by cutting early much is saved.

Melons of all kinds—Pumpkins.—Keep them clean of weeds, and the earth always open to avail of the refreshing dews and nutrient gases of the atmosphere.

Harvest Tools.—Have these overhauled—that is, overhaul them yourself—and have all that need it put in tip-top order. Do this at once—don't delay until to-morrow—recollect that all delays are dan-

gerous, and that there is no apology for the farmer who leaves the repairs of his harvest tools alone until they are wanted.

Supplies for Harvest.—We hope you have all these in your store-room, but if you have not yet procured them, go at once and make your purchases, and be sure to get an ample supply. No husbandman should leave such matters to the last moment.

Tobacco Fields.—These, of course, from the intelligence which directs their culture, will be preserved from weeds and grass, and placed in a position to profit as well by each succeeding rain as by the night-distilling dews.

Orchards.—Let the newly planted trees in times of drought be watered.

Examine the roots of your *peach* trees for worms, and be sure to give each his quietus with the point of a knitting needle, then wash the trunk, from the earth, as far as you can reach upwards, with a mixture of 2 parts soft soap, 1 part flour of sulphur and 1 part salt. That done, sow over the ground for 4 or 5 feet around the tree, a mixture of 8 parts salt and 2 parts saltpetre.

Go through your *Apple Orchard* and paint the trunk of each with the mixture we have recommended for peach trees.

Buckwheat.—If you omitted to take our advice and sow buckwheat last month, you may do so this, provided you get it in by 10th instant. It may up to that date be sown for grain or to be ploughed in for a green dressing. With the aid of a few bushels of lime, we should not despair of harvesting a fair crop of wheat from an indifferent soil, after ploughing in a good crop of buckwheat.

We have now concluded our *hints* for the month, and although you may not be able to find any thing novel in them, they may still serve to remind you of some duty that you have omitted to perform, and in the hope that they may be thus useful, we shall commend them to your favor, and will only add our most ardent wish that your fields may be luxuriant, your harvests abundant, and as to good prices for your surplus produce, we have no fears, for these cannot fail to reward your toils.

CORRECTION.—In a paragraph relative to Mr. E. Stabler's wheat, copied into our last No. from the Rockville Journal, an error occurred, which should be corrected. Instead of 12 bushels of lime, as there-in stated, 130 to 140 bushels to the acre had been applied—We learn from Mr. Stabler, all the arable land of the farm on which he resides, has from 60 to 150 bushels lime to the acre; and although he uses ground Bones and Guano quite liberally, the Lime is the ground work of the improvement—its liberal use has changed the product within 15 years, from 6 or 7 bushels of wheat, to 25 or 30 to the acre; in other words, the same land that then did not produce as much as 6 or 7 bushels of wheat or corn, will now yield heavy crops of both grain and grass.

ON THE RENOVATION OF WORN-OUT LAND.

To the Editor of the American Farmer.

SIR—My attention has been powerfully arrested by the communication in your last from Col. Capron, and the perusal of it has afforded me much gratification. It interested and edified me, and set me to thinking. Few men deserve more the thanks and applause of the agricultural community than the Colonel. Few, I may say none, have done, or are doing more to awaken the farmers of Maryland to a more just sense of their interests than they have heretofore displayed. I venture then to express the hope and belief that, in this field so worthy of his talents, he may find a *Laurel* less profitable, perchance, than the one which already entwines his brow; but not less honorable. The account of his onslaught upon the poverty-stricken field, which he has regenerated in a manner so masterly, is graphic and exciting, and the victory achieved deserves to be classed with others of somewhat greater present renown, which have also been won in the *Taylor fashion*. There is, however, no pleasure without its alloy, and the pleasure afforded me in this case by the Colonel's lively recital of his exploit is materially lessened by the almost insurmountable difficulties which would attend the attempt (and I am strongly incited to make it) to imitate him. It is easy to enumerate these difficulties; would it were as easy to remove them. In the first place, I cannot have these ashes delivered on my farm at any price. I should have to haul them with my own team from the city; this would require for 2,600 bushels 52 loads, which it would take 104 days to accomplish, and this must be done in the winter, by way of back-loading; and making the usual allowance for bad weather, roads, &c., the operation would extend over four months. Then the 50 wagon loads of manure would make 100 ox cart loads; for, alas, Mr. Editor, I have no mule teams. Nor could I spare so much, for I must reserve 40 loads for my two acres of potatoes. Then it would be impossible with ox teams to get it out in time for the oat crop. Again, my resources for extra labor are very limited, and the necessity of liming at least one twenty acre field every spring requires all the extra labor that I can command; and were I to attempt to bestow so much labor upon one field, as is contemplated by the Colonel's system, I should inevitably derange, almost incurably, the whole programme of my summer's work. This, I admit, is a somewhat selfish view of the subject, and yet I hazard little in saying that the large mass of our farmers are pretty nearly in my condition, and that very few, in favored localities and blessed with plethoric pockets, will find themselves able to follow the Colonel's most effectual prescription. I would not, however, on any account, be construed as wishing to detract from the merits of the Colonel's Buena Vista operations. I would not pluck one laurel from his brow, but would much prefer to add another wreath to those he now wears so gracefully. His is the merit, somewhat rare, of setting an example to men of abundant means, (would it were followed, Mr. Editor,) of investing their surplus change in the improvement of the soil, instead of snugging it in stocks, banks, ground rents, &c. &c.

Apart from my desire to offer to Col. Capron my thanks and congratulations as a member of the farming community, I had another object in the present communication. Whilst I regard with favor, and witness with undissembled pleasure, such bold strokes in the war of Improvement, as the one which has been considered, I very much fear that in the rage

for rapid and brilliant operations, and the desire to participate in the astonishing results produced by highly concentrated and bought manures, we may temporarily neglect the slower and more tedious, but I may venture to say, surer and more legitimate means of improving the soil. It is by dogged perseverance, untiring patience and hard labor, guided by skill and judgment, that American agriculture must ultimately rise to the European level—or above it. Now it will be difficult to define what I mean by skill; but to attempt the definition, I would say it is the art of making the soil improve itself, whilst it yields a support. Will I be pardoned for hazarding the assertion, that it requires little agricultural skill to improve land upon the high pressure system?—There is essentially very little difference between buying a highly improved farm for \$50 an acre, and buying a poor one at \$10, and expending \$40 on it in four successive years. The advantage in profit may be found on the side of buying the highly improved farm, if the skill is possessed to turn its improved condition to account, and this amount of skill is often met with.

The advantage in gratification, and the applause of others, may remain on the side of the improver, though, after all, he merely illustrates the axiom that an abundance of manure applied to any land—improveable—will make it rich. As I have before intimated, cases will occur of the spirited and judicious application of large means to the improvement of the soil. They will generally occur in favored localities; and the operators in these cases are justly entitled to be considered public benefactors. But they can form no safe guide or rule of conduct for the many, and may indeed mislead some who may be excited by the splendor of the achievement to its imitation, and discourage others who are unable to make the attempt. It is by slower means, less showy, but not less substantial, that our agriculturists must expect to bring their lands to the highest state of productiveness, which their capacity and that of the climate will permit. The approaches to this condition must be gradual, almost imperceptible, but continual and always progressive. The supply of Guano may fail, the supply of ashes is limited, a supply of lime may be unattainable for want of means; but the capacity of the soil for self-fertilization is unlimited; and it is upon this that we must mainly rely. How to avail ourselves of it, is the province of your spirited and useful journal, and its many talented and practical correspondents to teach. Study, observation, industry, economy, reflection, and, above all, patience, are necessary for the acquisition of this knowledge. It is by the "Lime labor" (no allusion to lime, Mr. Editor,) that in this as in literary pursuits, we must attain excellence. And allow me to express the opinion, that it is far easier to learn than to teach.

This communication has already reached to greater length than I intended; but, at the hazard of fatiguing your readers, I will recount, in illustration of my views, an incident of former years.

Many years ago, Mr. Editor, more years than I like to say, your present correspondent was a school boy in the Valley of Virginia. On one occasion he obtained permission of the "proper authorities" to accompany a party on an out-lying expedition, for the purpose of sport, some distance west of the place of his residence. Near the foot of the North Mountain, our party after an enlivening day of successful

*Slow process.

sport, reached the farm of a Dutchman, of unpronounceable, unspellable name, at whose house we quartered for the night. Born and bred east of the Blue Ridge, it was my first introduction to the peculiarities of a population of whom I had heard much and desired to know more. After a hospitable reception, abundant though homely cheer, and a "coucher," the singularities of which I shall pass over as not germane to the matter in hand, we prepared next morning to take up the route of our expedition: but were induced by the report of one of the party, who had heard of this man and his farm, and in fact knew him, to take a bird's-eye view of the premises; and well were we repaid for the trouble. Accustomed to the then slovenly shambling agriculture of Eastern Virginia, I had never seen *farming* or a *farm* before. It was magnificent. The fields were groaning under accumulated loads of verdure; the enclosures were straight and in perfect order; a herd of cows of enormous size, with udders like five gallon demijohns, fed in a luxuriant pasture. We questioned our host who attended us, pretty closely, to his visible annoyance, but could get very little out of him. We asked where he got his breed of cattle. He had raised them all himself; he said they got larger every year. We went to a gigantic stone barn under-laid with stabling. Such a team of horses I never saw: broad, square buttocks, round bodies, and legs like levers, and as fat as they could be; they almost rivalled the famous Flemish team which was recently exhibited in Baltimore. We learned that he had bred them himself; in fact the size of many of them was there to attest the excellence of the stock. Hogs of enormous size were waddling about the barn yard and lanes, also of native growth. The farm contained about 400 acres, every one of which seemed highly improved. In short, every thing evinced the perfection of agricultural skill and management. We got out of him that he had been living there about 20 years, that he had came there poor, and that the place was poor enough too. He had never bought manure—such an idea had apparently never entered his brain, and he could give no account whatever of his system, but seemed to think the condition of the farm, which we admired so much, the natural consequence of his residence of twenty years. He was dressed in linsey, with a red flannel shirt on, and was reputed to have hoarded much money. Now, this man was an eminent breeder, a most skilful farmer, and, according to Dean Swift, a benefactor of the human race. But he didn't know a word of it!—and so ends my story and my illustration, which I trust will be deemed apposite.

If these few hasty and disjointed reflections should be deemed worthy of a place in your valuable journal, I may trespass again upon your attention, not as one in authority, or aspiring to teach, but in my real character—that of

A LEARNER.
Baltimore County, May 17, 1847.

To "A LEARNER."—We insert the very sensible communication of our correspondent "A Learner," and while we shall hold him to his *promise* of favoring our columns again, we disclaim all idea of considering him in the light of a trespasser. Strong sense, good language, and a gentlemanly bearing, such as are to be found in his excellent paper, never yet presented a case of trespass to a sensible mind. His views accord pretty much with our own, and we were tempted several times to embody them, but as our correspondent has done it much better than we could, we return him our thanks.

INTERESTING EXPERIMENTS BY THE AGRICULTURAL SOCIETY OF MEDLEY'S DISTRICT, MONTGOMERY CO., Md.

Poolsville, Montgomery County, June, 1847.

To the Editor of the American Farmer.

DEAR SIR.—By a resolution passed, during the last April meeting of the then "Agricultural Society of Medley's District," and of which you were duly apprised, said Society declared itself an Auxiliary to the "Maryland Farmers' Club"—the constitution of which—Article 5, requires—that every such auxiliary, shall report through its president to you, *essays, experiments, agricultural accounts, or remarks of interest to the Club generally*—an effort to discharge said duty is the object of the present communication, in the preparation or copying of which, I find myself at considerable loss—not knowing well whether the reports annexed are of sufficient importance, to forward to your club—yet an anxious desire to promote by every means possible—the great cause of agriculture urges the necessity of unreserved action among brother farmers—hence, sir, you will find on perusal of the annexed reports—that the main object of the experiments was to point out the *effect* without regard to much minute detail. The chief aim of this club is to diffuse a correct knowledge of the science of agriculture as deduced from the works of the most distinguished authors, both in this country and Europe. In effecting this much required object—theory and practice are as much blended as circumstances will admit—the latter testing the former—thereby ascertaining how far such should be adopted in the anticipation of ultimate profit. The experiment assigned each member of the club, during the last year, has the foregoing object in view, to wit: to test the probable profit resulting from the application of various agents, ere large outlays should be made by the farmer—It is very much to be regretted that the past year was a very unfavorable one in trying experiments, on account of the quantity of rain—storms and various other causes, if to these be added, a want of experience and a proper knowledge of the *modus operandi* on the part of the experimenter.

There will arise an excuse, sufficient to justify in some degree what is wanting in the subjoined reports—made in accordance with the sixth article of the constitution, which says:

"In order to improve agriculture, each member shall make such experiments, on at least one square perch of land as may be appointed him by the society through a committee for that purpose, or by the President, as the society may deem fit, &c."

Accordingly, the following experiments, together with many others not yet reported to the club, were assigned by a committee with instruction to report the result of the same at the meeting in November—owing to various causes many failed to give in their reports, not deeming them of sufficient importance, yet the society considered it incumbent on them to report through you to your club, hoping thereby, that by a mutual exchange of opinion much information might be extended to them, on account of the excellent facilities and the amount of scientific knowledge possessed by your club. In hopes that such benefits may arise I shall at once proceed to lay before you a copy of said reports, beginning with that of our President.

You will dissolve 12½ lbs. of Chloride of Lime in 60 gallons of water, and apply as a top-dressing,

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from a watering-pot, to 1.8 acre of corn, when about 3 inches high; to another 1.8 acre apply a large handful of manure, when about three inches high; compare with an adjoining 1.8 acre.

REPORT.

Gentlemen,—I endeavored to carry out the experiment assigned me, although the great quantity of rain falling at the time, prevented me making it perfect. On the 30th of May I had a large handful of wood-pile manure placed around each hill of corn on 1.8 acre; the ground was too wet at that time to proceed with the experiment, and continued until the 19th of June, when I dissolved 12 pounds of Chloride of lime in 60 gallons of branch water and poured from a watering-pot an equal portion of it on each hill of corn; on the evening of the same day a very heavy rain fell—the soil, a stiff pale yellow clay, with yellow slate, and very poor. It had 40 bushels of lime put on it three years past; it was well cultivated.

In October I had the corn gathered and measured—on 1.8 acre adjoining (not manured) the product was 4 bushels of ears; on that 1.8 acre manured with wood manure, 5 bushels of ears; and on that 1.8 dressed with Chloride of lime, $4\frac{1}{2}$ bushels.

The average product per acre 3 3-5 barrels.

I deem the above experiment very imperfect; the great rain following the application of the Chloride of lime, must have carried off a large proportion; this in addition to the ground being too wet, it is reasonable to infer that much of its benefit was lost.

With your permission, I will endeavor to supply the above deficiency by giving you the result of another experiment made by me on a lot containing 11 acres—During the last of October and first of Nov. 1845, I had the lot plowed—it had been dressed with 40 bushels of lime per acre; in the winter and spring I had about three acres manured with compost of muck, composed of 20 loads of muck, 20 bushels of lime and 1 bushel of salt, intimately mixed and put on each acre (the muck had been thrown up and drained in the fall). On an adjoining three acres on the south end I had 20 loads of good stable manure to each acre—on two acres adjoining on the last I had 20 loads of cow-yard manure put on each acre—on one acre I had a cord of muck incorporated with 30 lbs. of Potash previously dissolved in water after laying two weeks hauled out.

In March I commenced spreading and plowing in with the three horse Maryland plow, followed by the substratum plow. On the 20th of April I began planting corn and finished on 22d; I gave it three ploughings and intended the 4th, but the wet weather prevented me, until it was too late. In August the weather was hot and dry about the time the ears were making, which lessened the size. The corn I planted was of a small size; there appeared to be little difference between the compost, stable, and cow manure—the potash compost not so good, but that part was inferior land, a white stiff clay and wet. The great rain destroyed the bottom land from $2\frac{1}{2}$ to 3 acres. I have gathered and measured; the product amounted to 54 barrels of long corn—the short corn I did not measure, but I am confident there was more than enough to make 60 barrels in all. The soil naturally a poor light yellow tenacious clay—would not, even under favorable circumstances, have produced, ere I limed it, 2 barrels of corn per acre.

DR. WILLIAM BREWER.

[2.]

Apply three bushels of salt to $\frac{1}{2}$ acre of wheat, and

as much charcoal as the salt is worth, on another $\frac{1}{2}$ acre, and as much barn or stable manure on another $\frac{1}{2}$ acre, as the salt is worth—compare, &c.

REPORT.

To the President of the Agricultural Society of Medley's.

Sir:—In obedience to the allotment of an experiment to try, during the past year, I have to say, that I applied (about the first of May, 1846) 12 bushels of charcoal to half an acre of wheat, 3 bushels of salt to $\frac{1}{2}$ acre of wheat, and the manure to amount to the value of the salt or charcoal, which I was to apply on the same quantity of land. Certain circumstances over which I had no control prevented me from carrying out the experiment—the manure I did not apply—the other two ingredients, to wit, the salt and charcoal, I tested. The application of salt increased the yield of the $\frac{1}{2}$ acre one bushel over a similar quantity of land undressed. The part on which the charcoal was applied, showed no difference from that adjoining where none was used, consequently I did not cut it apart—the portion on which the salt was sown appeared to be the best wheat a month or so after it was applied and it also ripened sooner, from which it may safely be inferred that considerable benefit may result to the farmer in its application to wheat. As regards the use of charcoal, so far as my experiment is concerned, it appeared to have produced no benefit, though recently it has been mentioned in some of the agricultural works as producing the most wonderful effects when applied to wheat—perhaps its want of action on this occasion, was owing to its being applied rather late, depriving it of absorbing sufficient quantities of those gases which it is said to hold in a state of solution for the growth of the plant, or to its not being properly prepared ere it was applied—who can tell?

Respectfully Yours,

WILLIAM MATTHEWS.

[3.]

Apply as a top dressing on sandy soil, about the 25th of April, upon $\frac{1}{2}$ acre of wheat, 25 lbs. of Glauber salts, on another $\frac{1}{2}$ acre adjoining, 25 lbs. Soda, and on another $\frac{1}{2}$ acre 5 cart loads of manure, or muck compost, compare with $\frac{1}{2}$ acre undressed.

REPORT.

To the President, &c.—Sir:—The above experiment assigned me, I performed with the exception of the application of the manure, which I omitted, being more anxious of testing the effects of the salts, whose fertilizing powers I had never tried.

May 15th I applied the Soda broad-cast to the quantity of wheat land specified. In about ten days after application it produced a marked change on the crop, appearing very green and luxuriant, until harvest made its appearance; it was then much higher and thicker than that adjoining—but the scab and rust attacked the field and rendered the crop comparatively good for nothing—this circumstance prevented me from proceeding any further with the experiment—the $\frac{1}{2}$ acre on which I applied the Glauber salts, showed no change in the growth of the wheat. I therefore inferred that their application served for no purpose, except expense and trouble. The application of the soda, had the wheat escaped the above named enemies, I think, would have shown such a difference in the amount of crop, as would have induced a second application.

Respectfully Yours,

HENRY YOUNG.

[4.]

Apply 25 lbs. of Sulphate of Soda upon $\frac{1}{2}$ acre of

grass—on an another $\frac{1}{4}$ acre of grass apply a like quantity of the Nitrate of Potash—compare with an adjoining $\frac{1}{4}$ acre undressed.

REPORT.

To the President, &c.—Sir:—I applied the above ingredients on a lot of grass about the 25th of March last, dividing said quantity as directed—since then I can perceive no difference in the growth of the grass, or any superiority over that portion undressed. The weather was very wet when I applied them, (salts.)

Respectfully Yours,

A. E. SOPER.

[5.]

Apply 25 lbs. of Sulphate of Soda and 75 lbs. Plaster of Paris, each to $\frac{1}{4}$ acre of clover—compare with an adjoining $\frac{1}{4}$ acre undressed.

REPORT.

To the President, &c.—Sir:—In compliance with the experiment assigned me, I have, as directed, applied in the month of April the Soda and Plaster, each on $\frac{1}{4}$ acre. They both produced a decided change on the growth of the clover, causing it to appear green and increasing its quantity, though I watched the growth of those two little lots anxiously in order to test the relative value of each ingredient, yet I could detect little or no difference in the appearance or amount of vegetable matter, but could easily see that they far surpassed that portion or quarter acre left undressed.

Respectfully submitted,

ELIAS SPALDING.

[6.]

Apply to the $\frac{1}{4}$ acre of wheat, six cart loads of muck, one bushel of salt, and five of lime, thoroughly mixed—on another $\frac{1}{4}$ acre apply five loads of stable manure—compare—the result.

REPORT.

To the President, &c.—Sir:—Agreeably to the experiment assigned me, I have the pleasure of stating, that on that portion of land to which I applied the muck, salt and lime, the yield was 4 $\frac{1}{2}$ bushels; and the latter $\frac{1}{4}$ acre 3 $\frac{1}{2}$ bushels, shewing a difference of one bushel, or of eight in an acre in favor of the compost. The application was made broad-cast about the 20th of April—the mixture or compost having remained about three weeks in the heap.

The result of the experiment would go to show, that the application of the compost above named to wheat would be attended with more profit to the farmer, than that of the stable manure.

Moreover, there is this advantage in its favor, that it can be produced to an indefinite amount on most farms; whereas, stable manure is generally limited in quantity.

Respectfully, &c.

GEO. BREWER.

[7.]

Apply to a $\frac{1}{4}$ acre of corn land broad-cast before planting, six loads of cow manure—to another $\frac{1}{4}$ acre 6 loads of muck, (fence corner scrapings) and the same quantity to another $\frac{1}{4}$ acre mixed with six bushels of lime, compare with an adjoining $\frac{1}{4}$ acre undressed.

REPORT.

To the President, &c.—Sir:—In compliance with the rule requiring that each member should report the result of the experiment assigned him, I beg leave to state, that agreeably with the requisitions of the foregoing experiment, I have during the past season attempted to ascertain the benefit resulting to corn, in applying those manures—the $\frac{1}{4}$ acre on which the cow manure was put, seemed to have

acted with more power, at first giving the corn quite a green luxuriant appearance; but subsequently the $\frac{1}{4}$ acre on which the muck was applied appeared equally as well, and towards ripening time no perceptible difference could be seen in any of the manured lots, which were at all stages of the growth superior to the undressed $\frac{1}{4}$ acre. I could see no difference where the lime was mixed with the muck, though I presume it will in due season tell for itself. One great effect produced by the application of the muck, it caused quite a fine growth of grass, which I with difficulty kept under during the growth of the corn—this fact shows that it possesses the elements requisite for vegetable matter. As the main object of the experiment was to ascertain the value of the muck as compared with cow manure, I did not cut separate, being satisfied that it amply repaid me for my trouble.

Respectfully Yours,

JOHN A. JONES.

[8.]

An experiment $\frac{1}{4}$ acre of corn testing the benefit of bone dust, was assigned to Dr. N. Brewer, who stated that "he marked off the requisite quantity of land, and applied whilst planting a table-spoonful to each hill. The difference in the growth was very marked throughout the season, being decidedly in favor of the bone-dust. Persons along the road observed and commented on it. It was not gathered separately, but the ears were longer and better filled than the adjoining corn—the quality of the soil was clay with a slight admixture of sand. I regret very much that professional duties prevented me from paying that attention to the experiment which it required, in order to render it of any utility as a precedent for my fellow members. I had other experiments in contemplation, but the continued rains in the spring, keeping the ground too wet until very late, prevented me from carrying them into effect, which would have afforded me great pleasure."

[9.]

You will dress $\frac{1}{4}$ acre of clay land for corn, with a compost of 15 bushels of unslacked lime, one bushel of salt and 50 bushels of rich muck or earth—to another $\frac{1}{4}$ acre 4 loads of fold yard manure—compare with an adjoining $\frac{1}{4}$ acre undressed.

REPORT.

To the President—Sir:

The above experiment assigned me by the society, I performed with as much regard to the object in view as I possibly could—the result of which was, that the application of the compost caused no perceptible difference over that portion of the field which was undressed. The $\frac{1}{4}$ acre on which the 4 loads of fold yard manure was put, produced the usual effect; I am nevertheless of opinion, that the above named compost is an excellent fertilizer, but the quantity was too little to be marked by any perceptible difference, particularly as its action is generally more apparent in the crops which follow its application. Respectfully, JOSEPH N. CHISWELL.

[10.]

Top dress a $\frac{1}{4}$ acre Corn, 30th May, with 37 lbs of Glauber Salts—another quarter acre with 10 cubic feet fold manure—compare with quarter acre undressed.

REPORT—(Verbally stated.)

Mr. President,—I tried the experiment you assigned me as directed, but could perceive no benefit from the application of the Glauber salts—neither during

its growth or when ripe—on the other hand, 1-4 acre where the manure was put in the hills, plainly exhibiting its stimulating powers by the rapid growth of the young plant, and sooner placing it beyond the reach of the various enemies which it has to encounter at this stage of its growth. I am of opinion, Mr. President, that the application of one or two of the elements requisite for the growth of a plant, will produce little effect, when the balance are also comparatively absent, which is pretty much the case in three-fourths of the lands in this district. I believe there exists a sufficient quantity of the inorganic elements in our light silicious soils, provided the proper agents were applied to call them into action, which agents, in the absence of manures, I believe to be grasses of various kinds. Such are my views.

WARREN KING.

Several experiments on the cultivation of the Potato, and the application to them of different ingredients as a manure, were tried, some of which have been reported, but as these reports on experiments have extended farther than was intended, I shall defer copying them until some other time, when they, with some other papers relative of the Club and its proceedings, may form the materials of an epistle to your society, provided a mutual exchange would warrant such a course.

By the by-laws of the Poolsville Auxiliary Club, a committee is annually appointed to visit the farm or farms of each member of the society, in Spring and Fall—and report the relative condition of each farm, stock, farming utensils, &c.—numbering the same in proportion to their respective excellence. Much good is supposed to result from such a plan. Presuming that your society might take an interest in the perusal of such a document, I'll transcribe you a copy of the last report of said committee.

NOVEMBER 20th, 1846.

To the Pres't. of the Agr'l Society of Medley's District:

Sir,—The committee on Farms beg leave to report, that we have examined the farms of the members of this society for the purpose of reporting their relative condition and improvement.

It is a matter of no small difficulty with the committee to weigh every circumstance which surrounds each member of this society, either to aid him in improvement, or retard perhaps his most anxious desire at the same time, to carry on a system of judicious farming. These are considerations which have a powerful weight in determining who are progressing most effectually under the circumstances which bind him; and it will be apparent to the society that the committee could not enter into an investigation of the private concerns of its members—therefore our judgment in some cases may be erroneous, but we proceed to give the result of our opinions founded upon such information as we could obtain.

The farms of Messrs. Samuel Young, Nathan T. Hempston, Henry Young, Dr. William Brewer, and Benj. White, appear to be the best conducted in regard to improvement; these gentlemen are all using lime as a fertilizer, and in every case decided benefit has been felt and seen. The farms of Messrs. S. Young, N. T. Hempston, and Dr. W. Brewer, are naturally a thin soil and forbidding to the farmer to expend much money on them; but these gentlemen have, by untiring industry and skill achieved much, and now have rendered their farms really valuable and productive. The other two gentlemen, Messrs. Henry Young and Benj. White, have land of a better quality naturally, they however, have much improved it by the use of lime, and a judicious system

of cultivation, and the committee believe that the testimony of the above gentlemen is united as to the good effects of lime applied to their land.

The manner of applying this mineral to the soil, and the why and wherefore of its action, the committee leave for the inquiry of the members of our society.

The farms of Messrs. William Cirril, Elias Spalding, Joseph N. Chiswell, John A. Jones, Jos. Brewer, George Brewer, Nicholas Brewer, F. S. Poole, P. H. McLeod, Joseph C. White, A. E. Soper, W. A. Chiswell, Benj. White, Warren King and William Matthews, were all examined and we find that their owners appear to be animated by a common spirit of improvement, some in one way, and some in another—each endeavoring to bring about a change for the better. The manufacture of a greater quantity of manure than formerly, appears to be a great object among them. More importance is attached to sowing clover seed and the grasses in general. Good and bad plowing is more talked about than usual.—Farming utensils are more particularly attended to as to quality and structure. Preparations for sheltering stock from the severity of winter is better than usual, and in a word, a disposition to farm well prevails. The committee find also, that the experiment allotted to each member to try, has in most cases been carried out and reported to the society in writing and verbally, and we here express an opinion relative to these experiments; they were, as we all know, principally selected from Johnston's Agricultural Chemistry, and consisted in the application of salts of the various kinds. The past season has, as you all are well aware, been one remarkable for the great quantity of rain which has fallen, and we say, that all saline applications have not been fairly met on account of the water dissolving them too hastily; however, we see yet that they have not failed to produce effect, from the reports given in.

The committee bestowed that attention to the examination of the farms which they deemed of importance to carry out the plan of the society. The views which we might have relative to each farm, could have been inserted here, but it would have run out the report to great length, without any benefit in our judgment. We however, have in general terms mentioned some of the growing principles we found amongst the members, and although there was much room for improvement in our system of farming, we feel impressed with the belief that the work has commenced, and we indulge the hope that it will be carried on to perfection.

Respectfully submitted,
ELIAS SPALDING,
SAMUEL YOUNG,
JOSEPH BREWER,

Com. on the Inspection of Farms.

To the Secretary of the Md. Farmers' Club.

Sir:—This report which is now forwarded, has been on hand some time, and its not being forwarded has been owing to several circumstances which I deem unnecessary to mention.

Our Society will be highly pleased to hear from your club on all matters of interest, and although the contents of this report are not as full as we would wish, yet we hope to improve in our progress.

You will please present this to the Club as our first communication.

I am Sir, very Respectfully, Your Ob't Serv't.

WM. BREWER,

Pres't. Medley's Dist. Ag. Soc.

WM. MATTHEWS, Rec. Sec.

REPORT

OF THE COMMITTEE ON AGRICULTURE,

*Of the House of Delegates of Md.*IN RELATION TO THE APPOINTMENT OF AN
AGRICULTURAL CHEMIST.

The committee on Agriculture do not deem it necessary to offer any apology for submitting the following report on the important subject referred to their consideration.

They are well aware that the present condition of our finances has made the Agriculturalists of the State, fully sensible of their real condition, and has caused them to look vigilantly into their future prospects. For although comprising such a large proportion of our citizens, and possessed of such a vast amount of the wealth of the State, they have ever been the most backward to seek the benefits of legislative aid for themselves, and the most forward to bestow it on other branches of industry. This is attributable alike to the habitual diffidence of that entire class of citizens; and to their proverbial liberality, and well known patriotism.

Fondly cherished principles of liberty, lying at the base of a free constitution, and a well formed government, so disposing and dispensing its powers that all its departments act in harmonious concert and serve as a check upon each other, will naturally enlist the affections and win the confidence of a free and intelligent people. But to make this love, this confidence lasting, their action should be at once wise, liberal and impartial. Honors and patronage should be equally disseminated amongst every class, law and justice dispensed with even hand to all, and legislative assistance fairly bestowed upon every important interest. To the unobscured fault in any one of these particulars is known chiefly by its effects. Its existence may therefore be of long continuance without being sensibly felt, and when felt it is often difficult to trace it to its proper source. Officers of each department are willing to screen themselves from censure, and responsibility is shifted from one to another, until all blame is at length thrown upon the constitution and its fundamental principles. Changes under the name of reform and additions by way of amendments are then resorted to, as the great panacea for political evils. Principles so dearly bought and highly valued by our fathers, are wantonly assailed, and institutions of government designed at once for their preservation and practical application inconsiderately overthrown.

It is very far from the intention of this committee to use a single expression calculated to create dissatisfaction with past legislation. No one however at all conversant with the political history of the State, can be of any other conviction, than that if the present condition of things had been foreseen, the system of internal improvements now acquiesced in by all as our true and best policy, even in a financial point of view never could have been commenced. It was well understood at the time throughout the State that greater benefits would result to the commercial and manufacturing classes than to the producing. The benefits to the latter were only expected and promised to be secondary and incidental. To them it was urged, and the arguments used were at the time deemed unanswerable, that no injury could possibly result. Direct taxation did not appear probable, hardly possible. Subsequent experience has however proven otherwise, and those who were only to be indirectly benefitted are now directly burthened

to the same, if not to a greater extent than those destined to derive greater and more immediate advantages. Their means are all accessible and beyond the power of concealment, visible to the assessor and tangible to the collector. Their habits of business and the nature of their employment forbid them those pecuniary facilities open to others, except on terms almost ruinous. Yet they are not repudiators, they have an elevated pride in the honor and faith of the State. Nor are they speculators or adventurers ready to abandon their homes upon every slight prospect of casual gain elsewhere. They are the genuine descendants of those who made Maryland a free State and bound her by the indissoluble ties of honor and patriotism to this great confederated republic. They cultivate the same soil their fathers ploughed before them, and rejoice at the prospect of seeing it absolved from every obligation placed upon it by the representatives of their choice. Still they wish not to be pressed beyond their ability, and expect all the encouragement they can justly ask and the legislature reasonably extend to them. It has already been said that the advantages for which the State is now taxed were only expected to be incidental. An overflowing treasury was expected to have resulted, and that system may yet be of great general good. A more enlarged and liberal system of education may spring up under its influence, a purer and more elevated standard of morals may be the effect of its judicious application. These blessings must, however, necessarily be remote. They ought not to be overlooked on that account alone. It is the part of a wise and growing people to cast their plans ahead; to provide for the increased greatness and happiness of future generations. The life-time of man is but short in comparison with the duration of a free and well governed nation. But there should be a limit to this anxiety, this forecast for the future. The present ought also to be considered in view of every important interest. In this respect the agricultural interest of our State does not seem to have been sufficiently provided for. The grand object of that great system was, and is, to open an outlet to products of neighboring States; to furnish an avenue to the boundless resources of the west to the Atlantic seaboard, and to bring immense plains of the richest and most fertile soil into close proximity to our own markets. Whilst these are in progress it is respectfully submitted that the planter and farmer of Maryland, can not unreasonably ask a small appropriation to aid them in improving their own half exhausted soil. They ask this with the still stronger claim, when it is remembered, that it is for the prosperity of the commercial interest, of the mineral regions, and the manufacturing establishments that they are now directly taxed. And these burthens are pressed upon them at a time when they are but little prepared to bear them.

The planter however well he may be convinced that his tobacco, by proper commercial regulation, might with foreign countries, might be rendered more profitable, both on account of an increased demand, and enhanced value, cannot expect any relief in that way from the State Legislature. This subject upon the organization of our government has been placed altogether under the control of Congress. The legislature has done all in its power by pressing the matter strongly on our representatives in Congress, and urging them to exert all their efforts to bring about a favorable modification of our commercial relations with European nations. That their efforts are at the time likely to be of any avail, does not seem at

probable. Whilst a devastating famine is at this time raging in many of those with whom we hold intercourse, and from whom most might be hoped, it would be unreasonable to expect that any encouragement or facilities can be extended to a product, which can only be regarded as a luxury. The necessities of subsistence are most in demand and must of course be first supplied. The consumption of that staple will be even probably diminished, and for that reason the price of it may even fall below its present standard. The greater demands for breadstuffs will also give additional employment to shipping, and in the same proportion will the expense of placing tobacco into foreign markets be increased, and the value of it in our markets diminished. Add to this the fact that there was on the 26th of January of the present year, 33,000 hogsheads more in the Baltimore market than was on hand there a year ago, and it is almost certain that the agriculturist who has heretofore embarked his capital and his labor in the production of that article, must either bestow them on some other species of production, or toil to no useful purpose. Thus at a time when the State and her citizens, are most in need is the prostration of that great interest for a considerable time clearly inevitable. To the grain grower there is rather a brighter prospect ahead. But humanity must prompt even him to hope that this will be but of short duration, originating as it does in the wants and sufferings of others. The rapidly with which corn and potatoes can be raised, and the extent to which these and wheat will be produced will probably within two harvests at least remove that demand; and then as is usual, an extraordinary supply will ensue, and that interest in its turn will be paralyzed for a while. It must be perceived that these extremes are particularly disastrous to the farmers of our State. Whilst a short crop elsewhere can only benefit them for a time, because of the immense available resources of the west, when required at a cheaper rate, the consequent superabundance from over production will give rise to a stagnation of a longer duration. These odds must remain still greater against us until our lands become, if not equally productive with those of other States, at least inferior to them only to the same extent that our convenience to market is greater. Hence it is that from the increased productiveness of our soil and from that alone, the agricultural interests of Maryland can be placed upon an equal footing with those of the neighboring States with whom they have to compete.

The Legislature has uniformly acknowledged the principle, that upon the moral and intellectual improvement of our citizens, depend not only their happiness, but the preservation of the entire social system, and of the fundamental principles upon which it rests. According to the spirit of our republican institutions, it appears obvious that the general enlightenment of the people, is one of the great and most primary ends of government; that the education of the rich and poor, should be amply provided for. If in that may in fact be justly regarded as a preferred claim upon the aggregate wealth of the State. It is in the place only mode of making them practically as well as theoretically, "free and equal."

If the State is at this time unwilling or unprepared to perform this obvious duty fully and without reserve, this committee still think, that some advance may be made which will not only not be inconsistent with her pecuniary interests, but will actually promote them. Any increase of the capital invested in any of the great interests of the State, will also be an

increase of her aggregate wealth; and any increase in the annual productiveness of that capital, will be so much added to the ability of those engaged in it, to supply the wants of the treasury. And in proportion to the amount of capital taxed in the hands of the agriculturalists, it is confidently believed that the profits arising from it are less than those yielded by any other branch of industry. This is owing chiefly to the fact that the value of the materials and sources of improvement within their reach, is not fully known or properly appreciated; or if known are not turned to the best possible account. To remedy this public evil, (for it certainly may be so regarded,) appears to be one of the obvious duties of the State; and the most appropriate means of effecting it is to introduce, and maintain a system of agricultural education.

The committee are well aware that there are great difficulties in the successful accomplishment of this very important object. It is always requisite that an individual should possess a certain amount of information on any subject, before he can fully appreciate all the advantages of a thorough acquaintance with it. Subjects upon which enlightenment is mostly needed, generally meet with the strongest opposition from the prejudices of those entirely unacquainted with them. Hence it would not be remarkable if many, who would in fact be most benefitted by that kind of education should be the most strenuous to oppose its introduction. Its advantages ought therefore to be first clearly pointed out, and even partially exhibited before they can be fairly estimated.—Thus far at least is it the duty of the Legislature at this time to go in aid of that cause. The small expense required cannot even in these days of general retrenchment, be regarded as a real objection. Should the Legislature therefore approve the plan recommended, the committee cannot suppose that the appropriation necessary to carry it into effect will be regarded as a serious obstacle. What they propose to recommend is the appointment of an Agricultural Chemist for the State.

It is not expected that this measure will at once and alone cause to be diffused amongst the agriculturists of the State, that full and extended knowledge, which it is hoped, will be ultimately imparted. The committee regard it as an initiatory step, by which from its partial advantages, the farmers throughout the State will be induced to place a proper estimate upon the true merits of a more enlarged system. They hope by its agency to lead those now actively engaged in cultivating the soil, to place within the reach of those who are to succeed them, and for whose interest and happiness they are chiefly stimulated to industry and exertion, the means of tilling it with greater success. It is also believed, that immediate benefits will accrue to themselves, more than sufficient to compensate them and the state, for the trivial expense necessary to be incurred.

It is deemed unnecessary here to explain in detail, the manner in which a scientific and practical chemist could render efficient aid to the agricultural interest. It is however well known that the people have never yet had an opportunity, had they desired it, of becoming either theoretically or practically acquainted with the interesting subject which it would be his duty to unfold. And the most casual observer of such subjects, cannot have failed to remark, that vast sources of improvement, either unused or misapplied, are utterly valueless to their owners and to the State, on account of a deficiency of knowledge on this subject. Principles equally well established, and far

more certain in their application, should govern the planter and the farmer in improving his land, and cultivating his crops, as regulate the physician in treating the diseased system or invigorating the weak constitution of his patient. Each variety of soil has its peculiar defects, which ought to be supplied; each kind of crop, its best mode of cultivation, which ought to be understood. These are constantly varying according to circumstances, but are always regulated by unchanging principles. To inculcate these principles, and to impart the requisite knowledge to ensure their proper application comprise the whole sphere of his duties.

A certain number of constituent ingredients must necessarily be combined to produce a given crop. These if they cannot be supplied by the atmosphere, must be found in the soil. The farmer therefore, who wishes to produce such a crop, ought first to ascertain whether his land is deficient in any of the necessary constituents. For the absence of any one or more of them would defeat his expectations, and for that reason ought to be supplied. It may be that he has at his command different kinds of materials for improvement. Each of them may contain one, two or more of the component elements of the crop; but none of them all. If he select a kind, which, although it may be rich in one or more of such components, yet, if it does not contain those in which his soil is deficient he will find that his labor has been thrown away, his expectations disappointed, and all future efforts paralyzed or discouraged. A full knowledge of agricultural chemistry, and its practical application, would relieve a person so situated from all these difficulties and disappointments. He would then have known what combination of elements the product to be raised consisted of; which of them could be supplied by the atmosphere; and by analysis which of them would be furnished by the soil; and by that means, which, if any, he would be obliged to add. He could also ascertain the ingredients of each sort of material of improvement at his disposal; and hence be enabled to apply exactly the kind necessary to make up the deficiency.

Much of the same kind has been found to act most beneficially on some soils, whilst on others it has either no decided effect or even a prejudicial one. On the same soil it has been found useful in the production of certain crops whilst others are injured by it. To the uninstructed in vegetable physiology and agricultural chemistry this is altogether unintelligible; whilst to one well informed on these most interesting subjects, it affords no mystery at all; it serves rather to open to his view the existence and harmonious operation of the immutable laws of nature coeval and coexistent with creation itself. He with almost unerring confidence might have foretold its effects; and been enabled to guard against its mischiefs and increase its usefulness. Place within the reach of the agriculturalists of the State the means of being informed on these subjects and let them be properly appreciated and used, and the decided conviction of this committee is, that the annual productions of the State cannot fail to be largely increased. Let but the vast deposits of mineral, calcareous, and even vegetable materials for improvement be turned to the best advantage, and the true principles of practical agriculture thoroughly understood, and the farming interests of Maryland will be second in point of profit to none other in the Union. The varieties of our soil, our climate, and facilities of transportation cannot be surpassed, if equalled, by any other State.

To effect this, time is required, public sentiment

must be prepared to appreciate the worth of such a system. And the measure proposed appears to the committee a proper introductory step, which even of itself will be productive of much practical good, and will bring about the first desirable result. When this shall have been effected, true economy will supply the means. Courses of agricultural education will be adopted in the public academies and schools; or schools for that especial purpose will be established. Agriculture will then be placed upon its proper level. It will no longer be regarded as a species of degrading drudgery, requiring neither education nor talent to understand and improve it; but will be inseparably connected with the highest branches of natural science upon which it is in truth dependant for its ultimate perfection.

It is only justice to add that the plan suggested first originated with a member of the committee on agriculture at the December session of 1840, whose zeal and exertions in behalf of this interest, it should be the pleasure of every friend of agriculture gratefully to acknowledge.

G. D. COAD, Chairman,
PETER GRABILL,
J. G. MORRISON,
WM. E. DOYLE,
A. H. SETH.

REPORT

Of the Committee appointed by the Agricultural Society of
MONTGOMERY COUNTY,
ON FIELDS AND FENCING.

To the Agricultural Society of Montgomery County:

We, the committee appointed at your last meeting, to report on the subject of Fields and Fencing, having bestowed much thought upon the matter submitted to us, respectfully ask for this, the result of our labor, that full and deliberate consideration due to a subject so greatly important to the agricultural interest of the country.

Your committee are satisfied that the important subject of "Fields and Fencing" has never been properly regarded by the people of this country. Viewed abstractedly, as a necessary appendage to the farm; and regarding as truths the old saws and maxims, that, "Good fencing makes good neighbors"—"He is a thrifty man whose fields are well fenced," &c.—the fencing in the country seems but a common place matter, and appears but a small speck in the picture of our country's wealth. But, will not the farmers who read this report—will not this society who hear it read, be startled—will you not say that your committee have been travelling amid the fields of fairy land; or that we have been looking at your rude fencing through the visual organs of a wild idealism, when we assert, that the sum total of all the money invested in all the gorgeous palaces in town and country, in city and village, in cottage and castle in this country, would not pay for your fencing? No, we do not make the assertion. It has been made by others, in higher places, and by better authority than your committee. We but repeat the assertion and ask, can this be true? Can the farmers of this country have an amount of money like this invested in fence rails, worming itself round their fields—exhaling and rotting in the sun and rain? We repeat, can this be true? If it be, is not this an important subject, and does it not deserve your grave consideration?

Your committee will not undertake here, nor do

we conceive it to be our duty in this report, to enter into minute calculations to prove the truth of this assertion. But, if it be assumed that an average sized farm, say three hundred acres of land, to be enclosed and divided into a sufficient number of fields, will require at least five miles of fencing; that if but one-half the State of Maryland be thus enclosed, it will require seventy thousand miles of fencing, which, if constructed upon the cheapest plan, the common worm fencing, may be fairly estimated at the price of one cord of wood, cut and transported to market, for every twenty-five yards of such fencing; and if, to this be added, an equally fair estimate for the more costly description of fencing now in extensive use, for railing and pailing, for ditching and banking, for gates, posts, bars, &c.; then multiply the sum total by five, the number of times which the fencing will require to be renewed for each renewal of the buildings; and the tyro in arithmetic will arrive at a truth more startling than even that asserted by your committee.

It has been said somewhere, that the knowledge of an evil is equal to one-half the remedy. Let us then endeavor to ascertain whether this vast amount of fencing be an evil; and when we have satisfied ourselves of that fact, if the above adage be true, we shall have relieved ourselves of at least one-half of its burthen. In the north of Europe, where the science of agriculture is in advance of us, perhaps more than a century, such a thing as an enclosed field is not known. But we are not yet prepared for this. It is not from the whole burthen, but only from one-half that your committee would now endeavor to relieve you. Is it necessary to the good husbandry of a farm, that it should be divided by fencing, into a number of fields? May not one broad field contain all your arable land, and one enclosure, embracing wood and waste land, contain all your stock? If we could be satisfied upon this point, one-fourth of the vast amount of dead capital now invested in rotting fence rails, would be at once redeemed, and made available for profitable use. Then, if we could be assured that our pigs, if kept in a well constructed sty, and well fed, for nine months, say from March to December, would eat less grain, and make more bacon, than if they had a field enclosed for their use, and were suffered to run at large for eighteen months as is now the general practice; we should then be able to redeem another fourth of our dead investment, by substituting a light post with three rails, for our present close fence of ten logs and a rider, and thus accomplish the entire aim of your committee; relief from one-half of our present burthen of fencing. Would you desire to know the amount of dead capital that would be thus redeemed to the farmers of Maryland? Ask the tyro who has just cyphered it out, and he will answer, a sum sufficient to pay off the whole State debt, in less time than it would take one line of fence to rot down.

But, having devoted a sufficient time to the evil, let us now endeavor to point out the remedy. May not one broad field contain all your arable land, and one enclosure, embracing wood and waste land, contain your stock? To this question, we answer emphatically, yes, and with increased facilities of improvement, and with greater productiveness of the soil. Let us, in the language of agricultural science, analyse this subject. Let us bring some practical observations to your view. Let us take a Montgomery farm of an average size, say three hundred acres of land, and cultivate it practically and scientifically, and note the result. Let it be divided by

fence into only two parts, arable and pasture; the arable to contain, as nearly as convenience will permit, about two hundred and ten acres; let this field be again divided by line, not by fence, into seven equal parts of thirty acres each; six for rotation of crops, and one, after being well prepared, to be sown in timothy for permanent meadow. From each of the remaining six fields a crop may be taken every year, and with increased fertility to the soil. It is a mistake—a popular error—that land requires rest. There are two maxims which we would, if we had the power, indelibly impress upon the mind of every farmer; first, "He who suffers his field to lie idle, will lose a crop;" and secondly, "He who pastures his field, will lose two crops." That it is a popular error that land requires rest, may be proven by a proverb quite as popular. Who does not understand the proverbial meaning of a "garden spot," as indicating the richest and most fertile spot.—And yet, the garden has no rest. But let us resume the cultivation of our ideal farm. It has been said, that a crop may be taken from each of the six fields, every year; and it may be added, that from three of the six fields, two crops may be taken. For the cultivation of this farm, the following is suggested as the best rotation, having in view, both the increased fertility of the soil, and best production of each succeeding crop. We will take the six fields in rotation, each succeeding the other in the same round of culture.

First year, Wheat—to be stacked when harvested, as near the centre of the field as possible, and threshed in August. In September, the field should be mowed, and the weeds and grass stacked, in layers and salted, with the wheat straw for winter use—and the field immediately fallowed.

Second year.—The field to be spread early in April with compost, (which will be particularly described hereafter) cross ploughed, and planted in corn, and again fallowed in the fall, as soon as the corn has been cut off and removed.

Third year, Oats—to be fallowed in August, receive a dressing of compost, and seeded in wheat.

Fourth year, Wheat—to be seeded with clover, and plastered with one bushel to the acre. The wheat to be stacked and threshed, and the weeds and grass to be cut and stacked, as in the first year.

Fifth year, Clover—to be plastered with one bushel of plaster to the acre. The clover to be mowed for soiling and for hay. The second crop to be mowed for seed.

Sixth year, Clover—To receive one bushel of plaster to the acre, as before; the field to be fallowed up deep, with three horses, in the month of June; the clover to be well turned under; the roller and harrow immediately to follow the plough, so as perfectly to level and fill up the cavities left by the plough, that the embedded mass may be protected and secured, as much as possible, from the action of the atmosphere. This is a nice operation, and should be performed under the immediate eye of the farmer. A large and valuable crop, ripe for the harvest, is given to the needy soil; and it is but just that the soil should receive the full benefit of the gift, that it may be enabled to return, with grateful bounty, the munificent donation. When we come to open our compost bank, of which we will presently speak, we will give our reasons more at large for our particularity in this operation. This field is now prepared for any crop that may be ripened between the months of June and October—such as tobacco, potatoes, buckwheat, &c., when it should be again fallowed,

composted, and seeded in wheat for the second rotary course.

Thus we shall have reaped, from our farm of three hundred acres, every year, sixty acres of wheat, thirty acres of corn, thirty acres of oats, thirty acres of timothy, and thirty of tobacco, potatoes, buckwheat, &c., and we shall have supplied our barn yard, for the use of our cattle, summer and winter, with sixty acres of wheat straw, sixty acres of weeds and grass, thirty acres of oat straw, thirty acres of corn fodder, and thirty acres of clover hay; all of which, after having supplied our cattle with the most nourishing food, has passed into the barn yard, and from thence into the compost bank, where its value has been increased more than ten fold, and has been returned to the soil, together with a valuable lay of green clover. We hazard nothing in saying that at the end of the first course of such a rotation, the farm has been increased in fertility, and is in a much better condition to enter upon the second course than it was upon the first.

But what has become of our stock, while we have been reaping so abundantly from our fields? We answer, that our horses have been in the plough or wagon, where they should ever be, except at night, and then they have been standing to a well filled manger. An idle horse is as great an incubus upon a farm, as an idle man; and if your horse has been at work all day, is it not inhuman to turn him out to nibble all night at a few stunted spears of grass for his sustenance? Our cattle? They have been in the woods browsing all day, and at night have been let into the barn-yard, where they have had a soft, well littered bed to rest, with cribs well filled, during the summer, with fresh clover hay, and, through the winter, with weeds and straw enough, and to spare. They have fared sumptuously. But the sheep? They cannot live on dry food; where are they? They are browsing in the old fields. They have had a range of ninety acres to ramble in all the summer; and if they have been well supplied with fodder, or good clover or timothy hay, through the winter, they are prepared to furnish our table with such saddles of mutton as would have satisfied even the fastidious taste of our old friend, Matthew Bramble, himself. And the pigs? They have been kept in the sty, and fed upon slops, made with corn and cob meal, for the first three months; after which they have had, in addition to their slop, a plentiful supply of green clover, until the apples began to fall; when boiled apples, with a little corn or oat meal, mixed with a large quantity of water, have kept them so fat and lazy, that they will scarcely stand up long enough to eat their allowance. We have killed twenty hogs, weighing one hundred and fifty pounds each, fed in this manner, upon half a bushel of oat or corn meal per day.

Having now seen that our stock has not suffered for want of their accustomed range over the fields, let us turn our attention to the farmer's treasure—his mine of wealth—his Goleconda—the compost bank. It will be readily perceived, that, from the quantity of provender that has been fed during the year, and from our attention to the barn-yard in keeping it well littered, we are provided with no inconsiderable quantity of material, with which to construct our compost bank, which should always be made in the field upon which it is to be applied, and at such convenient points as may afford the greatest facility to the operation.—The size of the compost bank is to be proportioned to the quantity of manure you can supply from your stable and barn-yard. For wheat,

one cart load of manure to the acre is sufficient; perhaps five would be better, but we prefer one for wheat, that we may reserve all the balance for the corn-field, where quantity is most needed. The first thing to be done is, to haul to the place of deposit just as many cart loads, or bushels of muck, or swamp earth, (and if that cannot be had, earth from the banks of running streams,) as will be equal to the quantity of manure which you design to use; say one cart load or 40 bushels of each to the acre; mix well with the muck or swamp earth five bushels of fresh lime for each acre of land, and let it stand until the lime is perfectly slaked—say three or four weeks; then add the barn yard manure, and for each acre five bushels of plaster of Paris, five bushels of crushed bones, and one hundred weight of guano—mix all well and thoroughly together—round up the heap, so as to turn off the water, if it should be caught in rain, and let it stand until the fermentation cools off; then turn and mix the heap thoroughly a second time. When it has undergone a second fermentation, and has cooled off, it is fit for use.—Spread it and plough it in immediately with the wheat. We are responsible for its effect. We know it will produce twenty bushels of wheat to the acre upon our poorest old fields. For corn, or for the first setting of timothy, we would double the quantity of all the several ingredients—using all the stable or barn-yard manure that we could obtain, with an equal quantity of swamp earth.—What the produce of corn will be on our poor old fields, we are not yet prepared to say, but hope we shall be able to give a good account of it at our next annual meeting.

Our compost bank being now ready for use, let us open it, and see what we have been doing. What we have been doing! No; what has been done there no mortal hand can do. Since we left it, a hand, greater than ours, has been at work there. We threw together the rude pile, but he has added the heaven, and changed the whole lump. Nearly the whole mass of organic material has been changed—has been decomposed—resolved into its original elements of carbon, oxygen, hydrogen and nitrogen; and these elements forming new combinations, are now prepared to enter into new organic life—again to spread the fields with green, waving corn—again to ripen into harvest—again to replenish our garners with the rich and golden fruits of our toil. We are not sufficiently scientific to explain the process by which this change has been wrought; we do not pretend to be scientific. Though an humble votary of science, we have not yet removed the sandals from off our feet, and dare not even enter the outer porch of her temple. We have but seen enough to know—

“There are more things in heaven and earth Horatio,

Than are dreamt of in your philosophy.”

But we do claim to be practical. If we have a claim to anything, it is to the title of a *practical farmer*. We claim it by prescription; if we have no better claim. It has been more than thirty years since we brightened our first ploughshare, and with the exception of a short respite, while we were pursuing the unprofitable study of our profession, we have been endeavoring to keep it bright, ever since. And we speak the veritable truth, upon our practical experience, when we say, (whether its materials comport with scientific rules or not,) the effect of our compost bank is not to be doubted.

We have enlarged upon this subject, because we know that some of our scientific friends have doubt-

ed, whether lime, coming in contact with guano, as it does in our compost bank, would not be destructive to the ammonia, which forms by far the most useful of its several component parts. And we know also, that many of our practical friends assert, that plaster of paris, which we use so freely, is injurious to the land—that, after a few years the land becomes *plaster sick*—that, sown on, or with wheat, it will keep it *green* too long—too late in the season to ripen, or to escape the rust.—We will answer our practical friends first, from our practical experience. And we will then, attempt to answer our scientific friends, from our poor stock of scientific knowledge. We have been familiar with the use of plaster of paris, for more than thirty years. We have seen land, that has received an annual top-dressing, of one or two bushels of plaster to the acre, and without intermission, for that length of time—we have seen it used in all quantities, from one to five hundred bushels to the acre—and we have never yet seen land *plaster sick*—not even where a whole barrel had been wasted in the field, and turned under by the plough.—But we have often seen it *poverty sick*, where a bushel of plaster never has been sown—and we have seen it sick, almost unto death, where herds of horses, cattle, sheep and hogs, have been permitted to feed upon, and trample it, in sunshine and in rain, through the whole summer, fall and winter—and we have seen it broken up in the spring, in huge massy flakes—and we have heard that it was plaster sick, from the effect of, perhaps, a bushel or two of plaster to the acre—but we were not credulous enough to believe; for we knew, that it would have been otherwise, if the stock had not been there. And we have seen wheat fields, which we have sown amidst a mass of dry weeds and litter, remain green, long after they should have put on their golden livery; and we have been told, it was the effect of plaster sown in the spring—but we were satisfied, that the dry weeds and litter had but retarded the early growth of wheat, and by supplying it freely with nutriment after the action of the summer's sun had effected their decomposition, the effect had been produced which had unjustly been attributed to the plaster of paris. And we do therefore assert upon our practical experience; that, there never has been, two more egregious *slanders* propagated, than the two which have been promulgated, against our old, and valued friend—plaster of paris. And which we hope, we have now and forever refuted.

We will now endeavor to answer the objections of our scientific friends. We have already said, that we were not permitted to enter even the outer porch, of the temple of science; but if our friends will take a peep with us, through some of the crevices of that temple; we may be permitted, perhaps, to see somewhat of the things that have been going on, within the bosom of our compost bank. We have already seen that nearly the whole mass of organic matter has resumed its four original elements—Carbon—Oxygen—Hydrogen—Nitrogen. It has been said that nature abhors a vacuum. Now there is one thing, which we think as much to be abhorred as a vacuum; we mean, a *state of single blessedness*. And so all nature think—and so the four atomic elements of which we are speaking think; for no sooner has the original union been dissolved, than the several elementary parts, hasten to form new attachments—new unions—new organic matter. The Oxygen unites with the Hydrogen and forms water. This, swelling with rage at the combustible materials with which it is surrounded, forces its exit through every pore of the

bank; completely separating in its flight, the minutest particles of earthy matter in the pile; and after rendering the whole, dry and friable as sand, wings its flight in the air, to be returned again to the fields, in drops of balmy dew. By the union of Carbon and Oxygen, carbonic acid is formed. This gas, from its great density, having no disposition to escape, spreads itself through, and pervades the whole bank; entering into, and forming many other, new, and useful combinations; some of which, we will presently notice. By the union of Hydrogen and Nitrogen Ammonia is produced. Now this Ammonia, the farmer's best friend, and one of the most useful productions, as well as one of the most *veritable jades*, in the whole bank, deserves something more than a mere passing notice at our hands. It is from the injurious effect of her contact with the lime, that we have undertaken to defend ourselves. We have called her a *veritable jade*; in her simple form of Hydrogen and Nitrogen she certainly is so. Possessing an aerial form, of but half the density of common air; and therefore, more light and frolicsome than the fitful breeze; no sooner can she find an aperture through which to escape, than she is off; riding upon the corners of the four winds—she frolics as it were, in the face of high heaven—dances on the firmament—and flirts with the stars. But thanks to our precaution, and to the abundance of our swamp earth, we have her fast, amid the dark recesses of our compost bank, and there, bountifully supplied with carbonic acid; which she takes as kindly, and quaffs as fondly, as if she were a thing of smiles, and her draughts of the siren—flattery. It has been said by a very distinguished poet, that, “——Shallow draughts intoxicate the brain; And drinking largely, sobers us again.”

Although this may be very good *poetry*, with young ladies and gentlemen; none of whom, were ever yet sobered by large potations, either, from the cup of flattery, or the flattering cup; yet it is certainly, *plain matter of fact* with Miss Ammonia; who, after sipping largely of this, her favorite beverage, is at once sobered down into plain old Miss Carbonate of Ammonia. No longer aerial, her form is tangible; but crusty and caustic,—acid in all her humours,—fatal to animal life—scathing and withering, in her contact with all vegetable life—her touch is death. Yet, she would still be off, if opportunity were given her; but she would seek the vapory mist, upon which to mount more gently, and float among the clouds; until caught in a thunderstorm, she is hurled headlong to the earth; where she remains soused and pattered in the mud, no longer than to obtain the revivifying influence of a bright sunny morn, when she is off again; again to mount her liquid car, again to repeat her frolicsome career. It is mostly in this form, she is found in our guano bags; and it is in this form, we have tumbled large quantities of her, into our compost bank; and we admit to our scientific friends, that, if in this form, she should come in contact with *quick lime*, she would speedily vomit forth her spleen of carbonic acid, and resume her frisky flirtations in the air. In other words, the carbonic acid, having a greater affinity to the lime, would be absorbed by it, and thus release the Ammonia.

But it will be remembered, we have no quick lime in our bank. It was almost pure carbonate of lime, before we added the ammonia, and if it was not quite so then, it has been rendered completely so since; by the abundance of carbonic acid, with which it has been supplied.—But to return to Miss

Carbonate of Ammonia. She is now done with flirtations, and like all persons who arrive at a certain age, she casts her eyes about for a suitable alliance some where, or with some body. And upon whom do you think she has fixed her earnest longing gaze? Why, upon our staid, harmless, and inert old friend, Gypsum or plaster of paris—the Rough and Ready of the compost bank; who has been hitherto lying perfectly undisturbed and unconcerned, amid the "wreck of matter" with which he has been surrounded.—There he lies—rough it is true, but ready, even for soft dalliance with Miss Carbonate of Ammonia: when two such beings as these meet, the one anxious, the other ready; the bonds of union are soon formed—she flies to his embrace—he receives her to his bosom—and the twain are one. Perhaps a union never effected a more perfect, or more salutary change, in both parties, than this union of gypsum with the carbonate of Ammonia. She readily imparts to him all her carbonic acid, and receives from him in return a bountiful supply of sulphuric acid. She becomes the farmer's best friend, in the form of Sulphate of Ammonia, which being liquified, mingles and unites freely with the soil, imparting food and nourishment to the young plants, and is then said to be fixed. He, under the familiar name of carbonate of lime, or common chalk, becomes useful in absorbing deleterious acids, in opening and rendering the soil light and friable, and not, as has so unjustly been said of him, making it hard, stiff or sick.

We might pursue this subject further, but it is not our province, even if we were capable of doing so, to write a scientific treatise upon the subject of our compost bank. We have said enough, we hope, to defend our disputed points; and from what has been said, the observant farmer will readily perceive what was meant, *when we said*, to render a clover fallow of the utmost benefit to the land was a nice operation, and required to be done, under the immediate eye of the farmer. The same process is to be undergone in the soil in that operation, as is here attempted to be described in the compost bank; and the same necessity exists for preventing the escape of the Ammonia and other gases.

We must conclude, by respectfully asking the pardon, of our friends and co-laborers, the Committees on rotation of crops and on the application of manures, for having trespassed, so much, and so long, upon their domains. But ours was a broad field—we had thrown down our fencing—and if, in the exuberance of our newly acquired liberty we have roamed beyond the metes of our own sphere, and trespassed upon other grounds than our own, it was but to glean from thence a few grains of information, to be sown broadcast among our friends, from the germs of which, we hope, in due season an abundant harvest of useful knowledge may be reaped. We would not hide our glimmering taper under a bushel, but would help by its feeble light, to fill the bushels of our neighbors.

We have trespassed—but we have done it, with the purest of all motives—the desire to do good—the deep, earnest, and ardent desire to do good, by promoting the agricultural interest and prosperity of our common country.

All of which is respectfully submitted,

JOHN A. CARTER, Committee.

Pot and Medicinal Herbs.—Plants of these may be still set out on shady borders, but they must be kept well watered until they take root.

THE AMERICAN FARMER.

BALTIMORE: JUNE 1, 1847.

TO OUR FRIENDS

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"*Laus est laudari a laudato viro.*"

FARMERS' CLUB.—We have received numerous enquiries relative to the Maryland Farmers' Club, whether it is still in existence, and the prospects of its continuance. We are authorised and requested to say in reply, that the Club was formed under the impression that it would be sustained by the farming community—but the very limited number of those most directly interested in the success of the project, who joined it, and the dissidence of those who did, in their attendance, induced a discontinuance of its meetings until a more propitious time—and we are happy to say, that a suitable apartment is engaged for the Club in the new Athenaeum building, now being erected in this city, and that the meetings will be recommenced under more favourable auspices, as soon as the building is ready for their accommodation, of which due notice will be given.

SUFFERING AT HOME.—We regret to learn, that there is much distress in some of the lower counties of our State, in consequences of the scarcity of provisions. The smaller farmers and others, are usually necessitated to sell their grain in the Fall, to meet their rent and liabilities, leaving frequently not more than is sufficient to carry them through the winter, intending to purchase in the spring from the proceeds of their gardens, &c.—but the high price of corn has sorely distressed them, and public meetings are being called and donations solicited to furnish them with the necessaries of life. Much loss has also been occasioned by the want of provender for stock.

VALUABLE PAPERS.—Our space will only permit us to call attention to the following valuable papers, to be found in the pages of the "*Farmer*" for the present month, viz : Reports of experiments, to the Medley's District Society, Montgomery Co.—Report of the Committee on Bay-side Farming, to the Trustees of the Agricultural Society of the Eastern Shore of Maryland—Proceedings of the St. Mary's Co. Society—Mr. Coad's Report to the Legislature of Maryland—Mr. Carter's Report to the Montgomery Co. on Fields & Fencing—On the Renovation of Wornout Lands—The adaptation of Sheep Husbandry to the Southern States, &c.—We think, after reading the above, our readers will admit, that if in each No. during the past year we have favored them with numerous dishes of the most savory viands, in the present and last, it may be truly said, that we have furnished them with a *dessert* suitable to so rich a repast.

FARMERS' LIBRARY.—The May No. of this splendid work, is as usual, filled with matter of much interest to the Farmer and Planter, as well as to the scholar. The engravings are admirable lithographs of Fat Wethers, Leicester Tup, and Leicester Ewe and Lamb—together with numerous illustrations accompanying the publication of Stephens' Book of the Farm. We regret our inability to give the table of contents for this No.; but the space occupied by the index to our present volume, precludes our giving various other matters about things in general, which we should be gratified to be enabled to present. However, we will say this much, let every one who reads this, determine to send on his DOLLAR forthwith, for the AMERICAN FARMER, for the new volume, commencing in July, and induce his neighbor to follow so laudable an example—and at the same time not to forget our old friend SKINNER, whose new volume commences in July also, and should be sustained by the patronage of every gentleman who takes pride in the profession.

Those who have received the *Farmers' Library* and *Downing's Horticulturist*, through the publisher of the *American Farmer*, are reminded that their subscriptions expire with the June No.—and it is hoped that they will immediately renew the same. Those desirous of obtaining back volumes, can also be supplied at publisher's prices.

To our friends who have usually been prompt to comply with our terms, of payment in advance, we tender our sincere thanks—and we especially request those who may have neglected to forward their subscription to the 2d volume, to remit it forthwith and to include that for the forthcoming volume at the same time.

CINCINNATI AGRICULTURAL SOCIETY.—We have a copy of the constitution of a new Agricultural Society, to be formed near Laurel, on the Baltimore and Washington rail road, under auspices which cannot fail to make it eminently successful. A preliminary meeting will take place in this month, and we shall take occasion in our next to speak more in detail in regard to it.

THE WOOL CLIP FOR 1847.—The true tendency of the operation of sundry measures of the government, was supposed to be calculated to depress the price of wool, but the small importation of foreign wool and continued blockade of Buenos Ayres, with the increased demand for low and middling class wool by reason of the increase of our army, caused prices to advance in the early part of the past winter, to an unlooked-for price, but as the season for the new clip advances, the price is receding, and will likely fall back to within ten per cent. of the lowest prices of last season.

There is no doubt of the clip of 1847 being large enough for the wants of our manufacturers—therefore if large importations of woollen goods take place, (as is anticipated,) and the port of Buenos Ayres be open, and our army be disbanded, the price of American wool will probably recede until arrested by an export demand.

The general bad order in which western wool is sent to market, causes loud complaint both in this country and Europe. More care and attention must be given to this branch of business, before our wool growers can realize high prices. We recommend to all Morrell's work on Wool and Sheep Husbandry as their guide—and refer to an article upon this subject from Mr. Morrell's pen, published in the proceedings of the Wool Grower's convention in a late No. of the Farmer. We have a large and growing demand in this market, for this important staple of our country, and men who understand their business, with ample means to make liberal advances on it.

FINE STOCK.—We noticed a few days ago, at the stables of Mr. H. Dukehart, a very superior young Cotswold Buck, about 1 year old, raised by J. W. Ware, Esq. of Berryville, Clarke Co., Va. He was purchased of Mr. Ware, by the Hon. R. F. Simpson, M. C. from South Carolina, and was on his way to the residence of that gentleman, in Pendleton, S. C. via Charleston. Notwithstanding the care to prevent his taking on too much fat, in consequence of his southern summer tour, yet he must have weighed 200 lbs. which, we think, may be considered pretty fair for one year old—the wool is very long, and about the same quality as the Bakewell. He was much admired by those who saw him, and certainly was the finest sheep we have ever seen for his age, and we hope he will arrive safe at his place of destination. Mr. Ware is to send some Ewes of the same breed to Mr. Simpson in the Fall.

We have recently had the pleasure of sending to Franklin Anderson, Esq. of Baltimore Co. the fine young Ayrshire Bull, which received the prize at the Philadelphia Agricultural Society's exhibition last Fall, and was purchased thereof by R. M. Henry, Esq. of Harford Co. Md. That gentleman having since received an imported animal from Europe, and having no further use for this, has parted with him to Mr. A. and we congratulate the latter gentleman on his having secured so fine a specimen of this excellent dairy breed for his farm.

JOHNSON'S DICTIONARY OF GARDENING—edited with numerous additions by David Landreth of Philadelphia.—This is the title of a new work, published by Lea & Blanchard, and placed on our table by Mr. N. Hickman, of this city. The plan of the work is similar to that of *Gardner's Farmers' Dictionary*, and *Johnson's Farmers' Encyclopedia*, and supplies a vacuum in horticultural literature which has been much needed. From the examination we have been enabled to give it, we are free in recommending it to our readers as a work which should be in the library of every horticulturist or farmer, and have no doubt it will have a ready sale. It can be had at the bookstore of Mr. Hickman, and of the publisher of the *Farmer*.—Price \$2.25.

THE AMERICAN SHEPHERD, by L. A. MORRELL.—A supply of this work has been received, and those desirous of obtaining a copy, can be supplied at our bookstore.

FALLOWING—BUCKWHEAT—PLASTER.

To the Editor of the American Farmer.

Please answer the following inquiries: My land is a stiff clay. Would it injure it to fallow it the 1st of June, leaving it exposed to the summer's sun? Would it be profitable to sow it in Buckwheat for a crop, or better to put it down in Buckwheat to be turned in? Does it require about the same preparation of the land as for wheat? Would the 15th or 20th of June be a good time to sow it for a crop? If sowed at that time, about what time would it be in a proper state to cut, or if turned in, to turn it in? What number of bushels should be sown to an acre? What number of bushels Buckwheat would land produce that would produce 20 bushels of wheat to the acre? What would probably be the price in Baltimore? My opinion is that plaster has little or no effect on Salt-water courses. If so, what is the reason? It is intended to put the above land in wheat this fall.

S. of Dorchester.

ANSWER.

1. We should consider it bad husbandry to fallow the field and leave it exposed to the summer's sun.

2. We believe it would be more profitable to sow it in buckwheat, than to have it exposed to a naked fallow.

3. We believe it would be still better, to sow it in buckwheat to be ploughed in as a green-dressing for a wheat crop.

4. The preparation of the land is the same for a crop of Buckwheat, as for wheat—thorough ploughing and harrowing, are necessary in both cases.

5. The 20th of June would be too late in ordinary falls for a crop of grain—though, if frost is late in coming, it might answer—for ploughing in it is sufficiently early.

6. The time of cutting, when grain is the object, is just when about one-half of the grain is ripe—that of ploughing in, is just when the plant comes into flower.

7. Land that will bring 20 bushels of wheat to the acre, is too valuable to be sown in buckwheat. Clay soils, though they will grow buckwheat, are not the soils in which it most delights—sands and sandy moulds, are the proper soils for it. We cannot say how many bushels to the acre our correspondent's land would yield; but will add, that on suitable soil from 30 to 40 bushels to the acre have been grown.

8. As to the price it would bring, we cannot state, but as other grains have been appreciated in value by the famine of Europe, so will its value be increased.

9. Our correspondent is not alone in his opinion, that Plaster has little or no effect on salt-water courses. Our opinion is different. As to the cause, we are not prepared to speak with certainty. We believe, however, that it will act efficiently on any soil which is not a wet one, whether it be located on the margin of a salt-water river, or on the mountain top, provided, there is not already a sufficient quantity of the mineral present in the soil. In that event, its effect would of course not be visible. In England, in certain localities, where the application of plaster

has produced no effect, on analysis it has been found that the soil already contained it in sufficient quantities.

THE CROPS.—Up to the time of the refreshing rains of Sunday, the 23d, the most gloomy forebodings were entertained in regard to the crops in this and the neighboring States—how far they have improved since, we have been able but partially to determine. So far as the Eastern Shore of this State is concerned, the annexed communication of our respected correspondent, will, from all accounts we have been able to obtain, be found to be a fair representation of the state of affairs in that peninsula, up to the time of writing. We have since seen the writer, who informs us that the rains subsequent to the date of his letter, has had a beneficial effect upon the crops—yet, in the very nature of things, there must be a very light harvest crop, and the misfortune is, that it is not confined to any particular crop, as corn, oats and hay have suffered as well as the wheat.

On the Western Shore, in the lower range of counties, we fear things are not much better—we are apprehensive that the rains of the 23d did not reach them to any extent—and gentlemen from Prince George's inform us that a gloomy face is upon the people as well as their lands. The rains have been more copious in the upper section of the State, and it is to be hoped, that they were in time to rescue the wheat from the imminent danger in which it was placed.

We do not deem it necessary to go into particulars, as our information is rather limited since the rains noticed above—but we know enough to induce us to believe that there will not, under any circumstances, be an average of either of the great staples of our country, and that prices must continue near the mark to which they have attained—therefore it behoves every one to avail himself of the opportunity he may enjoy, to provide such sources of supply for his stock, in order that they may be less dependent for their sustenance upon the corn crib.

In Pennsylvania, we learn from various sources, that the crops are not more promising than in our own State. In Virginia, the same may be said—the Lynchburg Virginian of the 12th ult. says, the weather has also seriously affected the tobacco plants. The dry cold weather has put that destroying insect, the fly, upon their plant beds, and in many neighborhoods they have entirely destroyed the plants.—Many planters have, in consequence, planted corn in their tobacco lots, and instead of making many hogsheds, will not make one. That destroying insect, the chinch bug, is making its appearance in unusual numbers for the time of the year, and it is feared that it will be very destructive—with a wet season they cannot commit very great injury, but should it be dry, the corn, as well as the wheat crop will be greatly damaged.

In Indiana and Illinois, the fall sown wheat is a good deal winter killed, but with this exception, the crop looks well throughout that region. Some accounts, however, induce the belief that Illinois will produce not more than enough wheat for her own use, but that an immense crop of corn will be raised.

In Ohio and New York, the crop will be as large as it was last year. In Michigan and Iowa the wheat has also suffered from winter killing, but not to the extent which has been experienced in Indiana and Illinois.

CAMBRIDGE, MD., May 21st, 1847.

To the Editor of the *American Farmer*.

SIR,—It is not my habit to complain of the laws of nature, or of their results; though often they may be unfortunate and inscrutable. Yet, I am compelled to lament the late and continuous disastrous drouth, with its irreparable injury to the wheat crops, and the darkening prospect of our corn crops, which are assuming a character to paralyze the energies of the most sanguine cultivator of the soil, and lead me to invoke the aid of my golden maxim: "Ne cede malis, sed contra, audentior ito."

For several years, we have been progressively and certainly losing the genial spring showers, proverbial for their former unvarying recurrence and enlivening influence, after the chilling blasts of the winter, upon the whole vegetable creation.

It would seem that, both at home and abroad, a great climatic revolution was in progress—not only in our own wide country, but in the trans-atlantic regions of Europe and Asia; extensive and repeated results make manifest this truth. The distribution of rain has been local and unequal—alternate floods and drouths and unseasonable temperatures, have been every where in operation, and disappointing the firmest reliances of man.

The present year, in Dorchester, we have had but one rain, from the first of April up to this 21st of May, when an accurate pluviometer measured 6-10 of an inch—and during that period high and drying winds have produced, literally, a drouth, which imminently threatens the most disastrous consequences.

The corn, which has been planted more than four weeks, has so partially vegetated and is so sickly in appearance, that many are marking out and planting anew their crops.

The ordinary wheat, which was impaired by a wet and long continued winter, will infallibly perish; and the few forward luxuriant portions (of which, really, mine was an instance) have been stricken as if with a blast of some deadly sirocco, or other poisonous infection, which parched the upper leaves; and upon examination, the bud leaf, which envelopes the nascent head, is withered and gangrenous down to the point from which it had issued. These plants necessarily rot and disappear, and the lateral branches have, after the solitary rain on the 8th of the present month, run up and promised to supply the place of the present stock—but should not another rain, of which there is now no prospect, arrive in time to sustain the new effort, it will be fruitless.

No insect whatever is to be found in my wheat—indeed, its roots and stock, up to the bud joint, were green, firm and luxuriant when the blight occurred, and with a good microscope, no insect, larva, or egg, can be discovered within or without, or from the root to the summit of the plant.

Add to this, the deplorable condition of our best and most highly improved upland pasture lands, scorched as with a fire passed over them, and you have a true picture of our county at the present time, in its agricultural relations.

During the whole period referred to, the anemometer in a favorable position oscillated between N. E. and S. E., the range of the Barometer has been high, varying from 29.5 to 30 inches—and the hygrometric indications have been uniformly unfavorable: the relations of the temperature of the air to that of the dew point have been remarkably distant, varying, upon daily observations, from 9 to 12 degrees—thus marking a dew point too low for the possible fall of rain.

Mr. Espy has set the limit of 6 or 8 degrees, as the maximum difference of the dew point below the atmospheric temperature, at which his artificial column can be converted into this desirable phenomenon, of a formation and fall of water from the upper regions.

When this phenomenon may occur to us in Dorchester, we know not, but—if speedily—our impending evils may still be much alleviated, though not wholly averted. Respectfully, J. E. M.

CATTLE SHOW AND FAIR AT EASTON.

The *Agricultural Society of Talbot County, Md.*, intend to hold a CATTLE SHOW AND FAIR at Easton, on Wednesday and Thursday, the 27th and 28th of OCTOBER next. A Sale of Live Stock, Agricultural Implements, and Household Manufactures, will take place during the exhibition.

We should be pleased if the Agricultural Implement makers of our city, and the Western Shore generally, were to make arrangements to be present on the occasion, with a display of their useful inventions. While the array they could make, would reflect honor upon themselves, as ingenious artisans and mechanics, it would add greatly to the effect and interest of the exhibition; besides they would have an opportunity of making many advantageous sales, and thus extend the sphere of their usefulness to the agriculturists of our State.

Many of the agricultural implement makers of Delaware, and Philadelphia, will doubtless be present with the productions of their respective establishments, and we should feel gratified, to see so fair a chance availed of by those of Baltimore, to compare relative skill with those of our sister States. Such rivalry—such collisions of the mechanical pursuits are becoming in themselves, and ever tend to good—they generate a feeling of laudable ambition, develop the resources of the mind, and open a wide and fruitful field for those peaceful contests, in which genius meets genius upon the broad platform of equality, and, becoming stimulated by the lofty purpose in view, directs its energies to the achievement of acts looking solely to the good of the community.

We need not say those who may visit Easton will be well received; for *Eastern Shore Hospitality* is proverbial, and no one ever yet sought, who deserved it, but found a hearty welcome and a kind and generous reception.

AGRICULTURAL MEETING.

An adjourned meeting of the citizens of St. Mary's county was held in Leonard Town, the 13th April, at which the following proceedings were had:

Col. B. I. HEARD took the Chair.

Geo. COMBS, Esq., Secretary.

H. G. S. KEY, Esq., presented from the committee appointed for that purpose, a preamble and Constitution, which were unanimously adopted.

Whereas on the 2d March, 1847, there was a general meeting held at Leonard Town, St. Mary's county, (public notice of which had been given in the Leonard Town Beacon,) to take into consideration the propriety and necessity of forming an Agricultural Society; and whereas, at said meeting there was a committee of three appointed for each election district of the county, for the purpose of obtaining the signatures of such gentlemen of their respective districts as are friendly to the object, and whose duty it was made to report to a meeting, to be held at the same place on the 9th March, 1847, and there was also a committee of five, to which the Presiding officer was made a member ex-officio, appointed to draft and submit to the adjourned meeting a draft of a Constitution for the government of the Society; and whereas the said district committees have reported and handed in a list of the names of gentlemen who are desirous of forming into a society for the improvement of Agriculture, and the committee on the Constitution being ready to report, Therefore,

We, the subscribers, do hereby form ourselves into a Society, for the purpose of improving the general condition of the farming and planting interests of the county, and the several interests therewith connected.

By perfecting as far as possible the present modes of improvement and cultivation by manuring.—By increasing the quantity and improving the quality of manures.—By discovering new sources of manure by experiments, and by availing ourselves of the experience of others in the formation and application of manures.—By procuring and introducing the best implements of husbandry.—By improving the breeds of domestic animals.—By devising means of destroying vermin and insects that are injurious to husbandry.—By improving our varieties of fruit and collecting new ones.—By procuring from abroad such vines, plants and seeds as may be deemed necessary or useful for subsistence or comfort.—By encouraging as far as we can a spirit of improvement among the ladies of our county, in the production of such fabrics as may be manufactured in our families.—By procuring and disseminating information through the medium of Agricultural papers, books, &c.—By endeavoring to increase the number and quality of our products, and lessening the quantity of some, so as to enhance the value of all. The better to effect the foregoing objects, which are hereby declared to be the only ones of the Society, and from which the Society will not depart, we hereby pledge all funds which may be raised by, or which may come into the possession of the Society by donation, &c., to be disposed of in premiums or in any other mode the Society may deem best; and lastly for the government of the Society we adopt the following

CONSTITUTION.

Article 1. This Society shall be styled the St. Mary's County Agricultural Society.

Article 2. Any citizen of the county may become a member of the Society who shall make application in person or by letter to a member of the Socie-

ty, and who shall propose him; provided a majority of the members present at any meeting shall sanction the proposition; and who, when elected, shall sign the Constitution and pay the annual contribution, which shall be one dollar per annum.

Article 3. Honorary members may be admitted upon proposition by any member of the Society, and the concurrence of a majority of members present.

Article 4. The Society shall hold one general meeting on the Wednesday after the second Tuesday of November, in each and every year. Special meetings may be called by the board of directors at any time they may deem it necessary, or upon the requisition of 20 members, to be held at the place of general meeting.

Article 5. The Society shall have a President, and five Vice Presidents, the latter to be selected, one from each of the election districts of the county, a Treasurer, a Corresponding Secretary, and a Recording Secretary, all of whom shall be elected by ballot or otherwise, (a majority of the members present being necessary to a choice,) and who shall hold their offices for one year, or until others are elected in their places, which elections shall take place at the annual meeting in November of each year, and shall be ineligible for the succeeding term.

Article 6. The President, together with five Vice Presidents and the Recording Secretary, shall constitute a Board of Directors or Executive Committee of the Society, a majority of whom shall constitute a quorum to transact business. The Board shall possess all the executive powers of the Society except such as may be specifically delegated to others; and shall apply and disburse all moneys appropriated by the Society according to the directions of the Society, if directions are given, if not, then to the best of their skill and judgment. The Board shall report to the annual meetings a full statement of their proceedings during the preceding year, and shall, if called upon, or if they deem it expedient, report to any special meeting of the Society that may take place, upon any matter of interest to the Society. The Board shall hold five meetings in the year—1st on the second Tuesday in January; 2d, first Tuesday in March Court; 3rd, the second Tuesday in May; 4th, the first Tuesday in August Court; 5th, the second Tuesday in October—at 3 o'clock, P. M., and may adjourn from day to day until they transact all necessary business, and may meet at any other time they deem it necessary for the benefit of the Society. It shall be the duty of the Board of Directors to suggest any changes they may deem proper to be made in the Constitution or rules for the government of the Society, and to propose subjects for the consideration of the society in relation to the various branches of agriculture, to be discussed by the Society at its next annual or special meeting.

Article 7. There shall also be selected by the Society upon its organization, and at each general annual meeting thereafter, by a majority of members present, five members of the society from each election district of the county, who shall form a board of managers for their respective districts; whose duty it shall be to collect information upon all subjects in relation to agriculture; to make examination into experiments in the making, applying or the effects of manures, or any particular system of cultivation, or any new sources of manure that may occur in their respective districts; to collect subscriptions and donations for the society; to examine the condition of domestic manufactures as carried on in

private families, and to gather information upon any other subjects embraced in the preamble to this constitution. And they shall report to the general board, and make returns at least four times a year—1st on the first Tuesday in March Court; 2d, the second Tuesday in May, 3d, the first Tuesday in August Court; 4th, the 2d Tuesday in October. They shall also have power, in the event of the place of V. President of their district becoming vacant, to appoint a person to fill that vacancy until the general meeting for the election of officers shall take place; and in the event of the Presidency of the Society becoming vacant, the committees or managers from the five election districts shall meet at Leonard Town as soon after as possible, and elect a person to fill the vacancy until the annual election of officers shall take place.

Article 8. The President shall preside at all meetings of the society and of the board, to whom all motions shall be addressed, and by whom all votes and decisions of the society or board shall be declared. In the absence of the President the senior Vice President present, or if neither of these shall be present, any member who may be appointed, shall preside for the time being.

Article 9. The Corresponding Secretary shall inform honorary members of their election, explain to them the objects of the society, and respectfully solicit their co-operation. He shall read to the Society all communications and answers which he may have made or received during their preceding recess, and shall make communications of such a nature, and to such societies, bodies or individuals, as the Society or the Board shall direct. He shall preserve in a book to be provided for the purpose, copies of such communications, and regularly file all letters and communications which may come into his possession relating to his office.

Article 10. The Recording Secretary shall attend all the meetings of the Society and of the board of directors, record all their proceedings, keep a regular list of the names of the members with the amount of their annual subscription, and of all donations to the society, with the name of the donors; all of which shall be opened to the inspection of the society and of the board, at any meeting.

Article 11. The Treasurer shall take particular care of all moneys or other funds belonging to the society, collect all moneys due, and keep a regular account of all receipts, and disbursements, so as to be able to exhibit the state of the funds to the society or board when required by either. He shall not pay any money out of the funds of the society, unless by an order of the board, signed by the president or officer presiding in his place.

Article 12. The Board of Directors shall take charge and care of all articles or property belonging to the society, except such as may be specifically assigned to other officers of the society, and may, if necessary, procure a place of safety for the deposit of the same on the best terms they can, and shall lay before the general meeting of the society any account of expenditures that may be made in furtherance of said object.

Article 13. This constitution may be altered or amended at the annual meetings of the society, but no alteration or amendment shall be made unless sanctioned by the votes of two-thirds of the members present; but a quorum to transact the ordinary business of the society shall consist of not less than fifteen members.

On motion, the chair appointed a committee con-

sisting of one from each election district, to nominate officers and directors. The committee consisted of the following gentlemen:

1st District,	Thomas Loker,
2d " "	Richard Thomas,
3d " "	H. G. S. Key,
4th " "	Edmund I. Plowden,
5th " "	John H. Sothoron,

who having retired for a short time, reported the following gentlemen as officers and directors.

President—Col. B. I. HEARD.

Vice Presidents—1st. district, Rev. Joseph Carbery; 2d, Col. Wm. Coad; 3d, Dr. Walter Briscoe; 4th, William H. Thomas; 5th, Col. J. H. Sothoron.

BOARD OF MANAGERS.

1st. E. District—Dr. C. M. Jones, William H. Loker, Dr. J. M. Broome, William L. Smith Dr. S. Evans.

2d. E. District—Richard Thomas, Col. C. Combs, Henry I. Carroll, R. N. Milburn, William Hebb.

3d E. District—Bennett Gough, Col. C. Billingsley, Edward Plater, Dr. Wm. I. Edelen, William Floyd.

4th E. District—Francis I. Stone, Dr. Thomas Matthews, John H. Key, James J. Gough, Edmund I. Plowden.

5th E. District—Dr. William Thomas, Albert Young, Dr. Joseph F. Shaw, Samuel Keech, James Miltimore.

Treasurer—E. Leo Spalding.

Corresponding Secretary—B. G. Harris.

Recording Secretary—Dr. Henry A. Ford.

On motion, the report of the committee was unanimously adopted.

On motion of H. G. S. Key, Esq., an order was adopted, directing the corresponding Secretary to invite Professor BAER to attend a meeting of the society to be held in Leonard Town, on the second Tuesday of May, and request him to deliver a lecture.

On motion, it was ordered that the constitution and proceedings of this meeting be published in the St. Mary's Beacon, and that a copy of the same be forwarded to the editor of the American Farmer.

B. I. HEARD, Chairman.

GEORGE COMES, Secretary.

The Corresponding Secretary of the St. Mary's Agricultural Society, has received a letter from Professor Baer, stating that he would be unable to attend the meeting of the Society which was to be held on Tuesday, 11th inst., and could not attend until after the 22d. Upon consultation with the officers of the society in his neighborhood, who considered that the object of the meeting was to meet Professor Baer, the corresponding Secretary takes the liberty of announcing that the Society will stand adjourned until Tuesday, the 8th day of June, when he is informed Professor Baer will be able to attend.

B. G. HARRIS, Corr. Sec.

It will be seen by the above, that there will be a meeting of the Agricultural Society of St. Mary's Co. at Leonardtown, on the 8th June. The publisher of the *American Farmer* hopes to have it in his power to avail himself of the opportunity of being present on the occasion, and will be happy to receive the names of new subscribers to his journal, and the renewal of the subscriptions of his old friends.

THE MONTGOMERY COUNTY AGRICULTURAL SOCIETY, will hold its regular meeting, in Rockville, on the First Monday of June.

W. VEIRS BOVIC, Sec'y.

BAY-SIDE FARMING.

Talbot County, April 20th, 1847.

To the Editor of the American Farmer.

Dear Sir:—At the last meeting of the Board of Trustees of the Maryland Agricultural Society for the Eastern Shore, the following report having been read, it was Resolved, unanimously, that it be published in the American Farmer and in the Farmers' Library.

Respectfully,

M. TILGHMAN GOLDSBROUGH, Secretary.

The Committee on Bay-Side Farming, appointed by the Trustees of the Agricultural Society for the Eastern Shore of Maryland, beg leave to report, in part:

That they have had the interesting subject referred to them under consideration for several months past, and have found some difficulty in their investigations in consequence of the want of facts on which they can rely; they have, at last, been obliged to depend upon tradition and their own limited observations.

That great improvements have been made in the agriculture of this beautiful region is manifest to all who have any acquaintance with it, and your committee will endeavor to show how they have been brought about.

The waters of the Chesapeake Bay, Miles river and Choptank, nearly embracing this peninsula, afford large annual supplies of sea-ware or sea-ores—and their banks contained large quantities of decomposed oyster shells, now nearly exhausted. It is believed that the first man in the district who used sea-ores to any considerable extent, as manure, was the late Lloyd Tilghman, Esq., as far back as sixty years; but he does not appear to have had many immediate followers. About thirty years ago much attention was drawn to crops of corn and wheat grown by Mr. William Hambleton, on land proverbially poor; principally by the use of these materials, aided by a well littered farm-yard. This example had a powerful effect: it showed, clearly, that increased products were within the reach of all—and the use of these valuable articles, so long neglected, extended rapidly—wherever they were within reach they were used—and, invariably, with success. Many who had no bank shells resorted to lime from oyster shells collected from creeks and rivers washing their shores, and this practice still continues with good effect.

The confining of cattle during the whole of the winter season on large accumulations of rich earth, pine rushes, straw, &c., in yards with permanent or temporary shelters about the same time, became more general, and appeared to suggest the penning of them on similar heaps during the summer—now almost universal. Your committee consider this a great improvement on the "ambulatory" cowpen of the last generation.

The pen is generally thirty to forty yards square—half worm fence, staked and capped, with bars or a rough gate—a good foundation of marsh or rich soil is covered over with pine rushes ready to receive the cattle in May. In this pen they continue to be confined every night until late in October—the pen receiving fresh stuff about once a fortnight. In this way the bank, under favorable circumstances, becomes more than two feet deep, and is hauled out before winter, when the fields are firm, ready for spreading in the spring—such a heap, with the winter crop of manure, is frequently sufficient to dress over the field intended for corn. The pen is generally made in that field, and supplies of earth

are obtained from the woods and from turning rows, or low places ploughed up as drains wherever required. In lands so level as those in the Bayside the removal of the rich soil on a headland is important—it acts as a broad though shallow ditch, and discharges much water after heavy falls of rain—while the "leads" serve to conduct it off without obstructing cultivation—they are generally about three feet wide, and the usual depth of ploughing.

A little more than twenty years ago the rich deposits of earth found at the heads of creeks began to be hauled out as manure. It appears wonderful that these natural compost beds should so long have been overlooked. They have been used to a great extent and with unflinching advantage.

No marl has been found in the district except in the neighborhood of the Royal Oak, on the lands of Major Dawson, Captain Meister and Mr. Townsend, who use it with much success.

Our waters afford an annual supply of fish manure in the Skate. They arrive, unfortunately, at a busy season—some are taken by farmers who have seines, while others buy of those who make a business of catching them for sale. Ashes and Guano, in a few cases, have been imported from Baltimore and applied with satisfactory results. Ashes can be laid down on our shores at a cost of 12½ or 13½ cents.—An enterprising practical farmer, Mr. Edw'd Covey, last year purchased and applied no less than 5,500 bushels, and this after ascertaining their value from several years' experience. Your committee consider this a fact of great value. It is difficult to introduce manures which require a direct outlay of money—yet it is obviously proper, by all reasonable means, to enrich our lands that our labor be not wasted.

The manner of using sea-ores is various: some put them in large heaps to be distributed at leisure,—others dress their cowpens with them, or drop them in the field to be spread at some distant day. The best way is to "double list them in at once on cornland to be crossed and planted next spring; thus evaporation is avoided and labour saved.

Your committee think it unnecessary to describe the mode of cultivation, further than to remark that it is much more thorough than formerly, and altogether in ridges. Few omit to sow clover seed; but little clover is cut for hay—it is either grazed off or turned in. Plaster of Paris is not used—no benefit having been found from repeated experiments.

The four field system, without fallow, is thought to be best for the improvement of land—a field of clover-lay to be added when in sufficient heart to bear the change—making, one in corn, two in wheat and one in pasture. This is believed to be the most profitable course of husbandry, and is followed by the best and most successful farmers in the district.

The old modes of securing the corn crop and fodder still continue. The seeding of wheat commences the first week in October, and ends early next month—some of those who have no falls are enabled to house their corn before they begin to seed wheat.

In conclusion, your committee, in the absence of records of crops, are under the necessity of resorting to conjecture—and they hope that they will not be deemed extravagant when they express the opinion that the products of the Bayside district have been, within the last thirty or forty years, quadrupled.

All which is respectfully submitted.

S. HAMBLETON,

W. H. HARRISON.

Talbot County, Md. Feb'y 15, 1847.

*In this level country, the cultivation is uniformly

in narrow ridges; and the backing of four furrow slices together in the furrow between two of the ridges, is called "double listing."

HORTICULTURAL.

WORK IN THE GARDEN.

Water-melons, Canteloupes, Musk-melons.—See that these are carefully weeded and kept clean of weeds. If the bugs attack them, go into your patches early of a morning while the dew is on the vines, kill all the bugs you find, and dust the vines with a mixture of 3 parts soot and 1 part flour of sulphur. Repeat this for several mornings in succession, and you can scarcely fail to save your vines and secure a good crop of each of these delicious fruits.

Squashes and Pumpkins.—Pursue the same course towards those as we have recommended for melons.

Sweet Potatoes.—Draw the earth around the hills to increase them and encourage the growth of the roots—be sure to keep the weeds down and the hills clean.

Cauliflowers.—The early cauliflowers should now be producing heads: carefully break down and turn in the outer leaves to preserve the flowers from sun and rain. In very dry weather water them, in hilling give to the hills a basin-like form to receive and retain the water.

Cabbages and Savoy.—Seize the first moist weather to set out your plants—taking the care to previously manure the ground well, dig it deep, and rake it fine. These will come into early autumn use.

Sowing Cabbage Seed.—Prepare a bed on your border by manuring and thoroughly digging and pulverizing it. Then sow Cabbage seed of various kinds.

Celery.—Your celery plants should now be set out. For this purpose select a piece of rich ground in an open exposure, mark out the trenches by line, 10 or 12 inches wide, and allow the space of 3 feet between trench and trench, which will be sufficient for the early plantations.

Dig each trench a spade deep, laying the dug out earth on equally each side, between the trenches, lay 3 inches deep of very rotten dung in the bottom of each trench, then pare the sides and dig the dung and parings with an inch or two of the loose mould at bottom, incorporating all well together, and put in the plants.

Previous to planting, trim the tops of the plants, by cutting off the long straggling leaves, and also the ends of their roots, leaving the former about six inches long, and the latter two.

Let them be planted with a dibble, in single rows, along the middle of each trench, allowing the distance of 4 or 5 inches between the plants. As soon as planted give them a plentiful watering, and let them be shaded until they strike root and begin to grow. To shade them put forks and poles up at the corners and place planks, or pine or cedar bows over them.

When the plants get 8 or 11 inches high begin to earth them up: this must be done in a dry day. The earth as raised must be made fine and laid gently along both of the plants, care to be taken to leave the hearts and tops free. This must be repeated every 10 days until they are blanched of a sufficient length for use.

We would remark that if a drought should occur when the plants are first set out, they must be watered every other afternoon just before sun down. This can be done without removing the bows by means of a watering pot.

Peas.—Sow a few rows of peas to afford a successive supply when the early sown ones are too hard for cooking. Peas now sown would thrive best in a situation not too much exposed to the sun.

Asparagus Beds.—Clean these of weeds.

Lettuce.—Transplant your plants, and sow seed also. If a drought should succeed, water every other afternoon just before sunset.

Small Salading of all Kinds.—The seed of those should now, be sown on shady borders. If the weather prove dry the watering pot should be used often and freely.

Kidney Beans.—To ensure a supply of beans when the earlier planted ones may give out, it would be well to plant now and again about the middle of the month. If the weather should prove dry, give the beans a watering or two.

Lima and other running Beans.—Hoe these up, clean between the hills, and support the vines by sticks or poles.

Radishes.—Sow Radish seed, and continue to do so at intervals of 10 days during the season; by so doing you will secure successive supplies.

Carrots and Parsnips.—Clean up your carrot and parsnip beds, and see that the plants do not stand too close.

Onions.—Take a long stick and lay the tops of the onions over on one side so as to bend them. In a few days turn the tops to the other side. This will check the growth of the tops and cause the bulbs to swell.

Beets.—Thin out and give your beets a thorough working. Seed may be sown now, though it is late, therefore if you have not done so already, do sow a few rows.

Okra, Tomatoes, Egg Plants.—Earth up the hills of these. If too thick thin them out. Be careful to keep the weeds down.

Red Peppers.—Plant out your Red Pepper plants.

Early Turnips.—Prepare a bed as we directed last month and sow early Dutch Turnip seed.

Strawberry Beds.—These should be occasionally watered between the rows; this must be particularly attended to while the vines are fruiting. New plantations may now be set out.

Grapes.—Tie up your grape vines as soon as the bloom is over, and see that they do not suffer for water.

Budding.—This operation may still be performed, though it would have been better to have done it in spring.

Hyacinths and Tulips.—The bulbs of these towards the latter part of the month should be taken up.

Box Edgings must now be trimmed.

Carnations and Pinks.—The operation of laying and piping these should commence as soon as the plants are in bloom.

Seed of each may now be sown, and plants set out.

FLORICULTURAL.

Prepared for the American Farmer by S. Feast, Florist.

Dolias.—To ensure a good bloom of these, plant them out the first week of this month, into a rich loamy soil and stake them carefully as they advance in growth.

Camellia Japonica.—As soon as they have finished their growth, may be removed to the open air and placed in a half shady situation. Water carefully, and attend to syringing frequently.

Cactuses may now be more abundantly supplied with water. —As soon as the bloom is over they should be re-potted and have the old wood thinned out.

Azaleas should have copious supplies of water—re-pot such as need it, and remove them to the open air, where they will be partially shaded from the hot sun.

Geraniums when done blooming should be removed to the open air, in order to harden their wood for cuttings next month.

China Asters and other tender annuals, which have been raised in pots or boxes should be transplanted to the borders.

Achimenes.—Re-pot these as they advance in growth.

Cyclamens must be kept in a shady situation and but sparingly watered.

Oxalis, Qulas, and other flowering bulbs in pots, which have completed their growth, should be laid on their sides until September.

Hardy Perennial Flower seeds sown this month will bloom next spring.

Tulips and Hyacinths may be taken up (after their leaves have decayed) and kept dry until October, when they should be again planted.

Caleolarias and Fuchsias in bloom should be partially shaded and carefully watered.

Scarlet Geraniums if planted out into the borders will give an abundance of blooms during the Summer.

Roses which have bloomed in pots may be turned out into the borders. Those intended for blooming next winter should be re-potted into larger sized pots of fresh loamy soil.

ENDLESS RAIL-WAY HORSE POWER.

LINGANORE, Frederick Co., Md., May 1, 1847.

Messrs. R. Sinclair, Jr. & Co., City of Baltimore,—

GENTLEMEN: Yours of the 28th ultimo, was this day received, requesting of me my opinion of the "Sinclair & Co's Rail-road Horse Power," and its accompanying "Thrasher."

The Maryland crop of the last year's wheat, and particularly that of Frederick, was inferior both with regard to quantity and quality, and therefore no Horse Power and Thrasher of any model, kind or construction, could be well and fairly tested, but notwithstanding which your Horse Power and Thrasher came up to a high standard.

The advantages of your *Two Horse Powers* are too clear to entertain largely its merits in detail on paper, as it requires but a short time to make clear its economy, both in saving labour, power and expense in thrashing, in comparison with other powers which I have seen. It will, with great ease and change of horses thrash as much grain in a given time as any reasonable farmer might desire, and any other *Power* or *Thrasher* can do. And I have no hesitation to earnestly recommend Sinclair & Co's *Two Horse Rail-road Power*, and its accompanying *Thrasher* and *Straw-carrier*, (the latter is only of ordinary construc-

tion,) to our agricultural community, as the best machine throughout, that I have yet seen in use.

Yours, respectfully,

ANTHONY KIMMEL.

The description of the above machine, together with a cut, will be found in the March No. 1846, of the *American Farmer*—also in the advertisement of Messrs. Sinclair, Jr. & Co. in the present No.

From the National Intelligencer.

ADAPTATION OF THE SOUTHERN STATES TO SHEEP HUSBANDRY AS AN IMPORTANT BRANCH OF INDUSTRY.

Some few years since, Mr. SKINNER, Editor of the *Farmers' Library*, then residing here as Assistant Postmaster-General, with his incorrigible addiction to the cause of Agriculture, addressed certain inquiries to Mr. CLINGMAN, touching the soil and climate and price of lands in his Congressional District in North Carolina—in reference especially to its adaptation to *Sheep Husbandry*.

Mr. CLINGMAN's answers were published in this paper at the time, and attracted much notice, as revealing, for that portion of his State, rich capabilities not generally appreciated or known. Since then the subject seems to have been attracting more and more attention, until now it has been taken up systematically, for a patient and thorough investigation, in a series of letters, appearing in the *Farmers' Library*, (published at New York and edited by Mr. SKINNER,) from the pen of a gentleman in the Western part of New-York—one whom as it would seem by the following communication from Virginia, brings to the question an ample stock of personal experience, with the farther advantage of familiarity with all that has been written on the general subject. These letters, when the series is completed, will, it is understood, be published in a detached form, illustrated by well executed engravings, and promise to make a complete manual for all who may desire either to embark in it or to understand it in all its bearings. The general scope of these letters, as far as they have yet appeared, is described in the following communication, which, as it could not now appear in the *Farmers' Library*, before June, I presented through our columns, in the full persuasion that the matter is one of interest for a large portion of our country readers.

Attention has, we see, been approvingly called in the *Courier & Enquirer* of New York, to proposals in that paper "for the establishment of a Sheep-fold of one hundred and twenty thousand head of sheep in Western Virginia."

In the meantime, and in view not so much of these letters as of the various and high order of the contents of every number of the periodical in which they are published, and of its unmistakable value for every one who would appreciate the literature and be well posted up in all the great improvements that Science is conferring on Agriculture, we cannot forbear again to recommend immediate subscription to the *Journal* itself.

SHEEP HUSBANDRY IN THE SOUTH.

MR. H. S. RANDALL'S LETTERS.

J. S. SKINNER, Esq.:—As a citizen of one of the Southern States, and a practical Agriculturist, I have perused with deep interest the admirable series of letters which have recently appeared in your valuable magazine on the practicability, expediency and utility of introducing *Sheep Husbandry* among

us to a greater extent than has hitherto prevailed. The author of these letters, HENRY S. RANDALL, Esq. of Cortland County, New York, is evidently thoroughly familiar with the subject he has undertaken to discuss in all its departments; and it is due to him to say that both the matter and the manner of these communications indicate not only the experience of an Agriculturist, but the finished scholar and the close and discriminating student. The array of authorities which he has brought to bear upon his favorite topic, no less than the skill and judgment with which they are marshalled in support of his views, leave no room to doubt the extent and variety of his investigations or the general soundness of the conclusions deduced; while the detailed results of his own long experience in this particular branch of farm husbandry are invaluable as practical confirmations of the theories which they are designed to illustrate and support.

I am free to confess that I entered upon the examination of the proofs brought forward in support of this writer's views with no very sanguine anticipations of his ability, however great his ingenuity, to establish the hypothesis with which he set out, viz: that a new and most profitable and permanent staple might, without difficulty and nearly without expense, be added to the productive industry of this quarter of the Union, which should not only serve for an adequate supply of the home demand, but afford a constantly increasing surplus for exportation. The statistics, however, of the first letter—the compilation and arrangement of which, by the way, must have cost Mr. R. a vast amount of labor and research—induced me to doubt whether, after all, we of the South had taken the necessary pains to ascertain fully the advantages of our position, soil, and climate in this respect: and as I progressed in the investigation I became more and more interested in the argument and the facts brought out. Surely "if this great object can be achieved," in the language of Mr. R. "and by the same means the husbandry of the regions now under cultivation be made to assume that mixed and convertible character which will both add to their present proceeds and better sustain their fertility for future demands on them, a benefit will be conferred on the South, the present and final results of which it would be difficult to over estimate." Let us see, then, how far forth the facts of the case will sustain the hypothesis of the writer.

The fact that "woolen fabrics constitute an important item in the imports of the Southern States," and that "for these they exchange the proceeds of no inconsiderable proportion of their industry with the Northern States and with Europe," is clearly incontrovertible: nor does it seem to admit of any question that an immense disparity exists in the growth and manufacture of wool in the Northern and Southern States—a disparity not satisfactorily, in my judgment, to be accounted for by any circumstance in the relative condition of the latter as to the soil, climate, or resources, when compared with the former. It being, then, conceded that the aggregate number of sheep and the aggregate amount of wool in the single State of New York, with a population of two and a half millions and an area of 46,000 square miles, exceed very considerably the same products in the ten States South of the Potomac and Ohio and West of the Mississippi, (including Louisiana), with a population of over six millions and an area of 495,000 square miles, Mr. RANDALL enters upon an examination of the causes and reasons

of this state of things. "Is there anything," he very properly inquires, "in their climate which renders them less favorable to the health or wool-producing qualities of the sheep, or is there anything in their topographical features, soils, or other circumstances which unfits them for a natural and easy adaptation to sheep husbandry? Or have they other staples so much more profitable that it is not an object to grow wool."

With reference to the climate and its effects upon the health and wool-producing qualities of the finest families of sheep, he has satisfactorily demonstrated that on this as well as on the Eastern Continent the most healthy sheep have long been reared under every degree of latitude adapted to the habitation of man—from the equator to the sixty-fifth degree of North latitude, from the burning plain of Africa and Asia to the almost perpetual frosts of Iceland, on the Eastern Continent, and in the lowest, hottest, and most unhealthy parts of the Southern States. He hence legitimately, as I think, draws the conclusion that, "so far as health is concerned, we are assuredly authorized to assume the position that no portion of the United States is too warm for sheep." As to the wool-producing quality of the animal, Mr. R. takes issue with the deductions which an examination of the census of 1840 in this particular might be supposed to authorize, and institutes a vigorous and close cross-examination of the returns of the marshals, resulting in the conclusion that "there is no great difference in the average product of wool per head in States separated by from ten to fifteen degrees of latitude, and no more than is clearly referable to incidental or extraneous causes, unless we come to the conclusion that the difference is in favor of the Southern States. He adds that "the comparative statistics of the extreme Southern States themselves show that in a majority of cases their best products of wool come from their Southern and warmer countries." Warmth of temperature, in his judgment, so far from being injurious, is on the contrary "absolutely conducive to the production of wool." His reasoning on his head seems to me conclusive. "Warm climates afford green and succulent herbage during a greater portion of the year than cold ones. Sheep plentifully supplied with green herbage keep in higher condition than when confined to that which is dry. High condition promotes those secretions which form wool."

In his second letter Mr. R. admits that, "other things being equal, the pelage of the sheep and some other animals becomes finer in cold climates and coarser in warm ones." This effect he is disposed to attribute chiefly to the amount and quality of the nutriment.

After citing the opinions of Youatt, Dr. Parry, and various English staplers in the corroboration of the tendency of British wool to deterioration from the effects of artificial and too stimulating food, he confirms the result thus obtained by his own experience as a sheep-breeder, and adds: "If the sheep-breeder in warm climates can take advantage of the tendency to produce greater quantities of wool, following that supply of succulent herbage throughout the year which Nature has placed at his disposal, and at the same time, by an unexpensive means which he can employ, combat the correlative tendency to increase coarseness of fibre, he has, most assuredly, other things being equal, an entire advantage over the breeder in colder regions." That the tendency here adverted to can be, and in numerous instances and under a great variety of circumstances has been,

combated in Southern climates, Mr. R. effectually and clearly demonstrates. This is effected by temperature and pasture, by careful management, and selection in breeding. The successful accumulation and preservation of the Merino race as far south as Australia and the Cape of Good Hope, without any perceptible deterioration of their wool, sufficiently establishes this proposition; and the testimony of Hon. HENRY CLAY and Mr. COCKRILL of Tennessee, both of whom have succeeded without difficulty in producing wool of the finest fibre, notwithstanding the temperature of the climate, puts the matter beyond all reasonable doubt. The warmth of the climate, however, may, in the opinion of Mr. R. increase both the length of fibre and the softness of the staple.

In his third letter, Mr. R. addressed himself to the important inquiry whether there is "anything in the natural features, soils, herbage, &c. of the Southern States which unfits them for a natural and easy adaptation to sheep husbandry?" Dividing the vast region south of the Ohio and Potomac and west of the Mississippi into three distinct zones, parallel to each other and to the Atlantic coast, viz: the lower or tide-water zone skirting the Atlantic, the middle or hilly, and the mountainous region—he examines with a critical eye, and with the aid of all the evidence which can be brought to bear upon the point from the most authentic and reliable sources, the capabilities and adaptation of each to the purposes of sheep husbandry. The facilities for grass culture afforded by the tide-water region are dwelt upon at considerable length, and the reasons for its neglect examined. He regards the *Bermuda* or Cumberland grass, the wire-grass of Virginia, as by far the best, most nutritious and profitable, as well for pasture as meadow, on the sterile sand of this zone. "It has been tried as far South as New Orleans, and the climate found no detriment to it. It will flourish on dry and almost barren sands." Mr. Affleck states that "it is preferred by stock of every description to all other grass, and it grows luxuriantly in every kind of soil." "One hundred pounds of grass afford upward of fifty of dry hay; and we do cut, as a regular crop, five tons of hay per acre each season." "No other grass will yield such an amount of valuable hay, surpass it in nutritive qualities, support on an acre of pasture such a quantity of stock, or improve the soil more quickly," &c. In addition to the obvious advantages thus accruing from the cultivation of the grasses, Mr. R. suggests, those derivable from the pea, which he regards as valuable to the South as clover to the North. Both the soil and climate, in his judgment, are particularly adapted to the development of this plant. "For sheep, and particularly for breeding ewes," he observes, "there is probably no feed in the world equal to nicely cured pea haulm, with a portion of the seed left unthreshed." Rye, oats and barley, sown in the Fall, afford likewise sweet green pasturage for sheep during our Southern Winter. Blades of corn, well cured, are also relished by them, and are regarded as thriving food. So with the sweet potato.

The conclusion which Mr. R. deduces from his researches in this branch of the subject may perhaps best be stated in his own language: "The foregoing facts show that the Southern States have already all that is necessary to feed stock and fertilize their fields. Their pea, take it all in all, is a full equivalent for the clover of the North. By means of it, of *Bermuda* and some other grasses, aided by the droppings of sheep and other cheap

and convenient manures, a large proportion of the tide-water zone, now so unproductive, can be converted into grazing lands, which will yield as good a per centage on present capital and investments as the best cotton uplands, and produce wool at a less expense per pound than any region of the United States north of the Potomac."

The middle or hilly zone and the mountain region are analysed, and their peculiar advantages pointed out with great discrimination and accuracy, in the fourth letter. Their adaptation to sheep husbandry in the former is obvious, and, as Mr. R. very pertinently observes, "it becomes, therefore, simply a question of profit and loss whether it is expedient to introduce it." With regard to the mountains—none of them rising above the range of the grasses—and extensive plains or table-lands on the sides, and occasionally even on the summits, being already tolerably well supplied with them and with other esculents suitable for sheep, little doubt can reasonably be entertained of the practicability and profit of this species of husbandry in this region. The opinions of Messrs. Earle, of North Carolina, Col. Colston, Hon. A. Stevenson, and Hon. W. L. Goggin, of Virginia, Hon. A. Beatty, of Kentucky, and Mr. C. F. Kramer, of Tennessee, in support of, and Mr. S. B. Buckley of Yates County, N. Y., in opposition to these views, are cited and commented upon.

The fifth letter is mainly devoted to an elaborate and able exposition of the profits of sheep husbandry in the Southern States. In connection with this subject, the practicability and comparative economy of making this branch of Agriculture "the basis of an effectual amelioration of soils either naturally sterile, or those which have been rendered so by excessive and injudicious cultivation, and its comparative efficacy in giving to Southern Agriculture a mixed and convertible character, and thereby sustaining or improving all the present good tillage lands in the place of continuing the new and old field system, (tilling land until it is worn out, then abandoning it and opening new lands,") are dwelt upon and enforced; and then the inquiry is started whether, even independently of all this, it might not be "better economy on the whole for the South to produce the raw material, and manufacture domestic woolsens, particularly for the apparel and bedding of Slaves, than to be dependent for them on England or Massachusetts." Doubtless it would; and although we of the South have hitherto been but backward students in the economic school, leaving our "profit and loss account" with all except our favorite staples, cotton and tobacco, to "balance" itself as it best might, there are unmistakable indications in the political horoscope that we may ultimately find our interest in "calculating the value" of our peculiar advantages, irrespective of the sources of supply indicated by Mr. R. At all events, I see no sufficient reason why we should not avail ourselves of the obvious facilities afforded by our genial climate and diversified soils for the introduction and efficient culture of that great staple, wool, in all its branches: why we may not manufacture sufficiently at least for our own consumption, if not for exportation, as well as our brethren of the North.

Mr. Randall, in my judgment, is entitled to the warmest thanks of every Southern farmer and planter for his enlightened and clear exposition of this whole subject; and I earnestly trust his valuable series of letters, when completed, will be widely circulated among us.

ACCOMAC.

Drummondton, Va., May, 1847.

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